



BUILDING A NEW ENGLAND VILLAGE

GREAT AMERICANS

BY

C. BERNARD RUTLEY

ILLUSTRATED BY

JACK MATTHEW

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FOREWORD

Columbus discovered America on October 12, 1492. Actually the first land sighted was the island of San Salvador in the Bahamas, and Columbus had no idea that he was on the threshold of a new continent. He thought he had reached an island off the coast of Asia, and accordingly he called that island and others he discovered the West Indies. He died in 1506 without realising his mistake, and still under the impression that he had found a short sea route to the East.

Columbus was followed by other explorers. John Cabot of Bristol was the first to reach the mainland of America. This was in the year 1497, and it was on the strength of Cabot's discovery that the English laid claim to the whole of the North American continent. France, however, also wanted a share in the new land. In 1534, a Breton sailor, named Jacques Cartier, explored the Gulf of St. Lawrence, and the following year he returned and sailed up the River St. Lawrence and spent the winter in an Indian village near a height which he named Mount Royal. The city of Montreal now stands on the place where Cartier passed his first winter in the New World, and other French explorers, following his lead, laid the foundations of the French dominion over Canada.

Such were the beginnings of the age of exploration, with England, France and Spain all competing for the prize. The Spaniards gradually extended their empire .

over Florida, Mexico and an immense tract of country between the Pacific and the Rocky Mountains. France made good her claim to Canada, while the English established a number of colonies along the Atlantic coast between Canada and Florida, and stretching inland to the Allegheny Mountains.

At the time when this story opens there were thirteen of these colonies. Virginia, the oldest, was founded in 1607. Then followed New Hampshire 1623, Massachusetts 1628, Maryland 1634, Rhode Island 1636, Connecticut 1636, Delaware 1638, North Carolina 1663, South Carolina 1663, New York 1664, New Jersey 1664, Pennsylvania 1681, and Georgia 1732. All these were English colonies before the War of Independence, and they owed their existence to various circumstances. Some, such as Virginia and Massachusetts, were founded by companies of adventurers and merchants under royal charter. The famous Pilgrim Fathers, who crossed the Atlantic in the *Mayflower* in 1620, formed Plymouth colony, which was merged in Massachusetts in 1691. Connecticut owed its beginning to a band of emigrants from Massachusetts who travelled westward to settle in the valley of the Connecticut River. New York and Delaware were conquests from the Dutch, who had also tried to settle in the New World, while others such as Maryland, Pennsylvania and the Carolinas actually began as huge grants of land given by Charles I and Charles II to individual men to whom they owed money or were otherwise indebted.

In the years preceding the War of Independence there were thus three great nations seeking territory

and sovereignty in the New World. There was Spain in the south and west, France in the north, and the English colonies strung out along the Atlantic coast. That was not all, however. Between Canada and the Gulf of Mexico, between the Allegheny Mountains and the Rockies, there was a vast territory watered by the Mississippi and its tributaries to parts of which both France and Britain laid claim, but which really belonged to nobody but the savage men and beasts who lived there.

Such were the three rival nations and the territory they held or desired to hold in the New World. There was, however, a great difference between their respective aims and reasons for being there. The chief objects of the Spaniards were gold and the spreading of the Roman Catholic religion. They did not want to settle in America, to make themselves new homes, and they certainly had no desire to improve the physical lot of the natives. Apart from the priests, the principal aim of the majority of Spaniards who came to the New World was to get rich as quickly as possible, and then to return home and live a life of luxury and ease in Spain.

The French ideas of colonisation were somewhat similar. They wished to build up a French empire in America, and therefore they sent their priests, and soldiers, and explorers westward towards the Pacific and south down the Mississippi claiming all the land they found. In these enterprises they looked upon the English as their chief rivals, and if they did not contemplate driving them out of the country altogether,

they were determined to do all they could to confine them to the narrow strip of territory between the Atlantic and the Allegheny Mountains. The French, in fact, wanted everything they could get, but they did not want all this new territory to be the home of Frenchmen. The new empire was to be for the glory of France. They wanted to enjoy the rich fur trade, and they desired to convert the Red Men to the Christian religion, but they had no intention of bringing their wives and families across the Atlantic, and so building up a second French nation in the New World. If the French had had their way the development of the continent would have followed a totally different course, and there would today have been no powerful United States of America.

Now compare the English motives for settling in the New World with those of France and Spain. They did not seek gold or any particular form of wealth. They did not make a point of converting the savages. What they wanted were houses, and villages, and towns to live in. They wanted a new country where they might be free from religious persecution, where they could rear their children as English children were reared, speaking the English tongue, and carrying on the customs and traditions of their forefathers. So while the Spaniard "made his pile" and returned to Spain, while the Frenchman, wishing to have a wife, married an Indian squaw and reared a family of half-breeds, the object of the British emigrants was something quite different. They wanted homes, and spurred on by this desire, they flocked across the Atlantic, bringing with them their wives and children, their furniture and

household goods, with the intention of making a lasting habitation in the New World where they and their descendants might live and in time build up a new English-speaking race. Few of them perhaps actually realised what they were doing, but because they wanted something permanent, because they came to look upon the new country as home and to love it, they in the end drove out the French and the Spaniards, who had no such solid basis for their dominion, and laid the foundations of a mighty nation.

But that is looking into the future. At the time this story opens North America was divided between England, Spain and France in the manner already described. Divided is really the wrong word, for actually the space occupied by the white settlers was but a tiny fraction of the mighty whole. All the rest was primeval earth, without roads, and where the only trails were those made by the fierce animals and still fiercer Red Men. In some parts immense forests covered the land for thousands of square miles, in others seemingly limitless plains rolled on and on with never a break on the horizon. Great mountains, rushing rivers, sun-scorched waterless deserts, all had their place in this new land, a land so vast that, in spite of its numberless Indian tribes, a man might travel for days without meeting or seeing sign of a fellow human creature.

Such was America when Benjamin Franklin was born. Near the settlements there was civilisation. In the towns and on the large country estates there were learning, wealth and breeding, but let a man take a horse and ride a few miles away, and he found himself

in a different land, a land as savage and untamed as it had been for ten hundred thousand years. How that land was tamed, how it became the home of a powerful people, and of the famous men who made the America of to-day, it is the purpose of this book to tell.

BENJAMIN FRANKLIN

1706-1790

In the latter part of the seventeenth century there lived in Ecton in Northamptonshire a certain Josiah Franklin. He was a son of the soil, and his people, who could trace their descent back for nearly four hundred years, were Protestants. Probably Josiah belonged to the strict Puritan sect, for the days of Cromwell were not far away, and it was religious persecution which forced him in 1685, the year of Charles II's death, to leave England and emigrate to America.

Having crossed the Atlantic, Josiah settled in the town of Boston, Massachusetts, where he started business as a candle-maker and soap-boiler. It was not a very paying profession, nevertheless he married twice, and on January 17, 1706, his tenth son and eighth child by his second wife was born in a house in Milk Street. In those days people with large families often gave one son to the Church as an offering to God, and Josiah decided that this new son of his should be a minister when he grew up. So the father planned, not knowing the sort of son that had been given to him, and in due course the baby boy was christened Benjamin, and at the age of eight he was sent to school.

No doubt young Benjamin enjoyed his lessons, for he was a boy who liked to know things, and you can picture him tramping blithely to school through the streets of Boston, and back again to his home in Milk Street and

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the humble food which was all his father could afford. Money was so scarce, indeed, that two years were all that could be spared out of Benjamin's life for schooling. The first year he went to the Boston Grammar School, and the second he spent at a school where they taught writing and arithmetic, and then, at the age of ten, he was taken away and told that he must help his father make soap and candles.

Benjamin hated the job! He hated the smell of soap and tallow, and the work of pouring the hot, greasy mess into moulds, clipping the candle-wicks, and the numberless odd tasks which fell to his lot. Neither did he like his father's suggestion that he should train for the Church. Young Franklin's idea of life was something much more exciting than soap-making and preaching. As a matter of fact, his great longing at that time was to be a sailor, and in his off hours he hung about the quays where he talked to seafarers and listened to their stories of pirates and other exciting yarns of the sea.

Nevertheless Benjamin continued to help his father till he was thirteen; then, seeing how the boy disliked his tasks, Josiah apprenticed him to his half-brother, James, who was a printer. At this time young Franklin was a well-grown, sturdy lad, strong and diligent in his work, even when he did not like it, and already a great swimmer. Swimming was to be one of Benjamin Franklin's chief recreations for a large part of his life, and he and his friends used to swim in the Charles River or bathe in the numerous coves which formed the shores of Massachusetts Bay. Another of the boy's

amusements was kite flying, and in time he became so skilful in this pastime that he would float a kite up into the air and then, entering the sea, let it pull him to and fro in the water.

Benjamin liked his new job as a printer much better than his old one. About this time, too, he began to lose his desire to be a sailor. Perhaps it was the sight of his brother's printing press, and the type, and the newspaper James Franklin produced that resulted in this change, but in any case reading books and writing now became Benjamin's chief recreation outside working hours.

But how was he to obtain the books he now desired so much? There were no free libraries in the year 1720, and Benjamin's father was much too poor to buy books for him. The boy pondered over this difficulty, and presently he thought out a novel plan. James contributed a small sum of money each week towards Benjamin's keep, and the boy told his brother that if he would give him half this money to spend as he liked he would feed himself. James agreed, and every week gave young Franklin the promised sum, of which the boy spent the smallest amount possible on food and saved the rest. Because meat was expensive he became a vegetarian, living on bread and potatoes and such cheap food, and when he had saved enough money in this manner, he bought a book.

There was little time for reading during the day, however, so Benjamin sat up late into the night, poring over his precious books by a guttering candle, and he was up at the break of day to continue his reading. In this manner he read *The Pilgrim's Progress*, a volume of

The Spectator, Locke's *On the Human Understanding*, and other works, deep books for a boy of his age, but Benjamin was a clever lad, and he wished to improve himself. Presently he began to write articles, and sent them to his brother's paper unsigned, and so well were they written that several of them were published.

So passed four years. Benjamin Franklin had become a regular contributor to the paper. He had also learned much about printing and type-making, and when James was sent to prison for writing some offensive political articles, he managed the business alone until his brother was released. Nevertheless Benjamin was not happy. James was a hot-tempered man, who may have been jealous of his younger brother's success as a writer, and he beat and kicked the boy whenever he was displeased with him, until at last Benjamin decided to run away. But first he must have money. He could not ask his father or James for any, so he sold some of his books, and with the small sum thus raised, he went down to the harbour and engaged his passage to New York on a sailing vessel.

The voyage was not a long one, and as soon as he reached New York, Benjamin tried to find work. But there was no work to be had, at least not for a poorly clad boy of seventeen, and at last he decided to leave New York and try his luck in Philadelphia. By this time his money was almost gone, so he set out to walk. Before long the weather turned wet, and the boy got drenched and muddy, for there were few good roads in those days, but he kept doggedly on, and the third day, having covered fifty miles on foot, he reached the Dela-

ware River where he was fortunate in obtaining passage in a sailing boat bound for Philadelphia.

It was a Sunday morning in October, 1723, when young Franklin first set foot in the city which had been founded by the great William Penn forty-one years before. He must have looked a sorry young tramp as he trudged along through the quiet streets, for he was covered with mud, and tired, and desperately hungry, and all he had in the world between him and starvation was one dollar. Benjamin was not particularly worried, however. He found a baker's shop where he bought some rolls, and then continued his walk, munching as he went. On the way he met many people going to church who laughed at him because of his dirty appearance, and the boy particularly noticed a pretty young girl in a house he passed who appeared to find him very funny. But Benjamin was much too tired to care what people thought of him, and presently he followed a crowd of worshippers into a Quakers' meeting-house where he promptly fell asleep and slept all through the service.

In such manner Benjamin Franklin spent his first day in the city of which he was to become the most famous citizen. The next day he obtained work in the office of a printer named Samuel Keimer, and he found lodgings at the house belonging to the father of the pretty girl who had laughed at him, and who, he now learned, was named Deborah Read.

Benjamin quickly proved his worth to his new employer. He was a rapid compositor and even at seventeen a clever printer, and he soon became the leading craftsman in Mr. Keimer's shop. Life was now much more

pleasant for Benjamin. He was no longer ill-treated by a surly brother. He had money to spend, too. Money with which to buy books, and good clothes, and a silver watch, and no doubt he occasionally bought Deborah Read a present, for he and the girl had become great friends.

About this time Benjamin made another friend, none other than Sir William Keith, Governor of Pennsylvania. The Governor was a good-natured man and became interested in the clever young printer whom he saw whenever he visited Mr. Keimer's shop. Sometimes he talked to him, and one day he suggested to Franklin that he should go to London to gain experience and to buy a press and type with which he could return to Philadelphia and start a newspaper and printing office of his own. The suggestion sounded wonderful in Benjamin's ears, but there was one great obstacle. Money! Benjamin had no money for such a trip, far less to buy a printing press when he reached England, and his father had none to give him. He was very disappointed, but in this extremity the Governor came to his aid. He promised to send a letter to England which, on being presented in the right quarter, would not only provide Benjamin with enough funds to keep him, but would be sufficient to buy the coveted press. Young Franklin was overjoyed. He was only eighteen, and already he had a powerful friend who seemed determined to help him with his career. We can imagine the speed with which he ran home that day and told Deborah the wonderful news. The girl was equally pleased, and on the strength of Benjamin's bright pros-

pects, the two became engaged to be married on his return from England.

Benjamin Franklin set out on his great adventure in the autumn of 1724 and reached London in December. But there a terrible disappointment awaited him. Sir William Keith's good-nature had not gone beyond words and promises. There was no letter in the mail-bags on board the ship which had brought the young printer to England, and Benjamin found himself in a strange land, without friends and with hardly any money, and forced to earn his living. It was a cruel blow, but Benjamin did not let it make him bitter, and swallowing his disappointment, the young American set about finding work. This proved an easy matter for one of his skill, and first he obtained employment at Palmer's Printing House in Bartholomew Close, and later at Watts's Printing House. To begin with he was a source of much amusement to his English companions. When they drank beer he drank water, so they called him the "Water American". But their amusement changed to respect when he proved that not only was he a better workman than they were, but he was also better at sports, for when they went down to the Thames for a swim, he astonished all who saw him by the speed at which he travelled through the water.

Franklin was, indeed, a very original young man. He did not partake of strong drinks and he was also a light eater. Then he took a cold bath every morning, a thing few people did in those days, and he liked to sit in his bedroom without any clothes on and let the cool, fresh air play over his body. He thought it was good

for him, and he was right. Another of Franklin's principles was represented by a little book which he kept by him all through his life. In it he wrote down the thirteen virtues which he considered a man should possess if he were to lead a good life. Then if he ate too much, or wasted precious time, or did an injustice, or in any way sinned against one of the virtues, he jotted it down in the book, and so, by constant study, he learned just what his chief shortcomings were, and what he must do to improve himself. To improve, to get on, not at the expense of other people, but by helping them to improve and get on at the same time, was, indeed, Franklin's aim all through life, and he pursued it faithfully, as you will read.

Franklin spent eighteen months in England, and did not return to Philadelphia until October, 1726. He was now twenty years of age, and after working some time for a Quaker merchant named Denham, he went back to his old employer, Samuel Keimer. Then, in 1728, he and a friend started a printing house of their own, and when two years later this partnership ended, Franklin became the sole proprietor of the business.

It was in this year, 1730, that Benjamin and Deborah married. Their home was a small house near the marketplace, and over the door Franklin set up a big board on which was printed in large letters, "BENJAMIN FRANKLIN, PRINTER". How the young couple laboured! At that time Franklin was publishing a small newspaper called the *Pennsylvania Gazette*, and being still too poor to employ many helpers, he and Deborah did most of the work themselves. Franklin was his own

editor and his own reporter. He wrote most of the articles in his paper, set the type, made the ink, and worked the press with his own hands. Often he might be seen trundling a large wheelbarrow loaded with clean new paper through the streets towards his printing office, and while he was thus occupied, Deborah looked after the house, attended the shop, folded and stitched his printed matter, and carried her basket to market, making the housekeeping money go as far as possible.

Success was on the way, however. Franklin was a clever writer, and his spirited articles and the fine clear type in which they were printed soon made his paper the most popular in Philadelphia. But he was not content. He loved books, and he remembered how difficult it had been for him to obtain them as a boy, and in 1731, when he was only twenty-five, he established one of the first circulating libraries in America. Then in 1733 he started *Poor Richard's Almanack*, a publication which was so successful that it was issued regularly for twenty-five years, with an annual sale of 10,000 copies, which made it the American best-seller of those days.

Life was prospering with Benjamin and Deborah, and the young husband found more time to improve himself. At the age of twenty-seven he began to teach himself French, Spanish, Italian and Latin, and in time he was able to read and understand all these languages. Three years later he was made clerk to the General Assembly of Pennsylvania, and the following year he was appointed postmaster in Philadelphia.

Benjamin Franklin was rapidly becoming one of that

city's leading citizens, and with that passion of his to improve things, in the following years he set on foot many social reforms. Philadelphia was the first city in America to have an organised police and a fire company, thanks to Franklin. He invented a street lamp superior to all other lamps of that period, and with it lighted the streets of the city. He made his fellow-citizens see how bad their roads were, and how stupid it was to wade knee-deep in mud when the weather was wet, and so the streets of Philadelphia were paved for the first time. He helped to found the school which eventually became the University of Pennsylvania, and the first city hospital.

In all these activities there is visible Franklin's desire to help his fellow creatures. By this time he was a wealthy man, and thanks to his prosperous printing business, he had been able to retire at the age of forty from active printing and devote his energies to other things. Science had always interested him, and now he began to study electricity. Very little was known at that time about that great force, but a Dutch scientist of Leyden in Holland had invented a jar in which electricity could be bottled up. This jar was called a Leyden jar. It was coated with tinfoil both inside and out and fitted with a lid through which passed a brass rod, and one of these jars was among Franklin's most prized possessions. He was always experimenting with it, and playing tricks on his friends. Unknown to them he would attach a wire from the jar to a metal object which he then asked someone to pick up, with the result that the victim got an electric shock and the surprise of his life.



FRANKLIN WORKED THE PRESS WITH HIS OWN HANDS

But this was only amusement and Franklin had much bigger ideas. He believed that the dazzling flash of lightning in a thunderstorm and the small electric spark he was able to make with his Leyden jar were the same thing and caused by the same force, and he set himself to prove it by getting an electric spark from a storm-cloud.

How was he to do it? He remembered his old skill in flying kites, and that gave him an idea. So he took a kite and fitted a light iron spike to the top. Then to the earth end of the string he tied an iron key, and waited impatiently for the next storm. Presently it came, and Franklin flew his kite up into the black storm-cloud overhead, and then waited to see what would happen. He was not kept long in suspense. As the rain wetted the string, electricity from the cloud began to pass down it to the key, and when Franklin put his hand close to the key out flew a spark just like the one he could obtain from his Leyden jar. He had proved that the electricity in the storm-cloud and the electricity in the jar were the same.

What use could he make of this discovery? Again Franklin set his brain to work. In those days there were no lightning conductors, and high buildings were often struck during thunderstorms. Could not his discovery be used in some manner to prevent such accidents? If a piece of string could draw lightning from a cloud, a metal rod would do the same thing much better, and if that metal rod could be used to attract the lightning away from high buildings, then the danger of such buildings being struck would be lessened. So Franklin must

have reasoned, and the result was the first lightning rod in the world, which Franklin attached to his house in Philadelphia to save it from being struck during a storm. Nowadays there are millions of lightning conductors throughout the world, but they all owe their inception to Franklin, and date from the day when he flew a kite up into a storm-cloud.

Franklin's active brain was never at rest, and he was always trying to invent something new or improve something already invented. The bifocal eyeglasses, for both near and distant sight, which many people wear nowadays, were first invented by Franklin for his own use. He invented an open stove better than anything then in existence. He suggested water-tight compartments in ships, floating anchors at which a ship could ride during a storm, and numbers of other things, and towards the end of his life he actually suggested Daylight Saving, so far ahead of his times was he in some ways.

It is difficult, indeed, to discover what Benjamin Franklin did not do in the course of his long life. The poor boy who had only spent two years at school, and had started life as a soap- and candle-maker, was now, by his own efforts, a wealthy and accomplished man. He was well known as a printer, a writer—his autobiography is one of the most interesting ever written—an inventor and a scientist, and soon he was to become a statesman. In 1751, at the age of forty-five, he was elected to the General Assembly of Pennsylvania, that is to say to the State Parliament, and for thirteen years he served on that body. Franklin's fame in the latter half of his life does, in fact, rest more upon his work as

a statesman than as an inventor or scientist. He would have much preferred to spend his life in quiet seclusion, occupying his time in making experiments instead of helping to make laws and treaties, and it proves what a great man he was that his country would not allow him to do so, but was continually pressing him into her service in one way or another.

All really great men are busy men. They have no time to waste, and Franklin was no exception to the rule. In 1753 he and another man, William Hunter, were made joint postmasters for the colonies, and he held this position for twenty-one years, visiting during that period nearly every post office in the English settlements. Yet he found time for still more important work. The French were then in possession of Canada, and claimed all the vast territory west of the Alleghenies. England disputed this claim, and as neither side showed any intention of giving way to the other, it became clear that war between the two countries must sooner or later result.

Franklin realised all this, and he saw, too, more clearly than most men, the dangers of the situation. The French in Canada obeyed one ruler, the King of France, and when he gave the order the whole country would spring to arms, but it was not so with the English colonies. They had no such common bond. True, they all acknowledged King George II, but at the same time each colony was independent of all the others, owing them no loyalty, often, indeed, looking upon them as rivals, so that it was very difficult to persuade them to act together in the face of a common danger.

Franklin saw the full perils of this situation, and at a meeting of representatives in Albany in 1754 he proposed a plan of union. He suggested that the thirteen colonies should be united under a single governor or president-general assisted by a council of representatives elected by the colonial assemblies or legislatures. This plan was called the Albany Plan, and proved Franklin to be a far-sighted statesman, but neither the British government nor the colonies would agree to it, and so the matter was dropped.

Meanwhile, the first shots of the war foreseen by Franklin had already been fired. On May 28, at a place called Great Meadows, a small force of militiamen under Colonel Washington had met and defeated a French detachment, and the following year General Braddock and a British army arrived in Virginia to assist the colonists in their fight against the foe. Like most British wars this one began badly, and General Braddock was killed and his army disastrously defeated in an attack on Fort Duquesne on the Ohio. This defeat left the north-western frontier of Pennsylvania open to attack, and 1756 found Franklin for a time transformed into a soldier, and out in the wilderness superintending the building of blockhouses, and raising troops to guard the colony against the French and their Indian allies.

Franklin did not remain a soldier long. Soon he was back in Philadelphia, and in 1757 he was sent to England carrying a petition to the King regarding the rights of Pennsylvania. While there he met the great English statesman, William Pitt. It is said that he urged

on him the importance of driving the French out of Canada, saying that there would be no safety for the English colonies so long as the French were there to stab them in the back. Thus he was partly responsible for the despatch of General Wolfe and his army, which resulted in the defeat of Montcalm upon the Heights of Abraham, and the capture of Quebec. To a certain extent, therefore, Britain owes her wide Dominion of Canada to Benjamin Franklin.

Franklin remained in England for five years, making many friends, and then, in 1762, he returned to Philadelphia with the intention of at last retiring from public life and settling down quietly to his experiments. But he was much too valuable a man to be allowed to rest. The soap-maker's son was now one of the foremost men in America, and soon he was back again in England on business of state. He remained there ten years. They were ten fateful years, years of continual quarrelling between Britain and her American colonies, quarrelling which ended in the War of Independence. There was wrong on both sides. The war with France had cost Britain a great deal of money, and though some of the English colonies in America—there were thirteen at that time—had subscribed generously to the cost, others had not paid a penny. Naturally, the British government did not think this fair. The war had been fought chiefly to ensure the safety of the colonists, and it was also necessary to keep a large standing army in America after the war for their protection against the Indians still friendly to the French, and it seemed only just that the people who benefited

most should share in the cost. Accordingly, in order to raise the necessary money, Parliament began to levy taxes on the English colonies.

Instantly the colonists were up in arms. Many did not want to pay anything, but the argument advanced by the great majority was that if they had to pay they would fix their own taxes, and they would not be taxed by a government in which they had no representatives. Again there was justice in this contention. So there was right on both sides, as the best men in the two countries admitted. Unfortunately, George III of Great Britain was a stupid, obstinate man, and he and his chief minister, Lord North, were determined that the American colonists should obey the laws passed by the Parliament in England, while the colonists were equally determined to rule themselves by means of their elected assemblies, and above all, to vote their own taxes.

Thus the quarrel began and continued. Franklin, who was at that time the representative in England of the colonies of Pennsylvania, Massachusetts, Georgia and New Jersey, did all he could to reconcile the two parties, but without success. So for ten years the quarrel raged, the feeling on both sides growing gradually more bitter, until at last, on April 19, 1775, shots were fired between British troops and a body of colonists at Lexington in Massachusetts, and the War of Independence, which was to result in the formation of the United States of America, had begun.

Before this happened, on March 21, 1775, Franklin had said good-bye to England and set sail for America. He had, by his advice to the British ministers, done

everything possible to preserve peace, but he had failed, and now he threw himself wholeheartedly into the cause of American freedom. He was sixty-nine years of age, too old to fight, but his brain was as fine as ever and at the service of his country. It was he who in June, 1776, with John Adams, Roger Sherman, and Robert R. Livingston, helped Thomas Jefferson to draw up the famous Declaration of Independence which for ever severed the ties joining the colonies to the mother country, and in the autumn of the same year he sailed for France to try and win the friendship of that country to the colonial cause.

It was a difficult task this fine old man had before him. By this time he was one of the best-known public men in the world, and the French people and statesmen gave him an immense welcome, but though France sympathised with the colonists in their struggle for freedom, her rulers still hesitated to take sides against Britain on their behalf. Nevertheless, Franklin persevered, and after Burgoyne's surrender at Saratoga had increased French confidence in an American victory, a treaty of mutual friendship and aid was signed between the two countries on February 6, 1778.

This was a tremendous triumph for the man who had been born the son of a poor candle-maker. Without the aid in men, money and ships which was now forthcoming, and about which you will read in the next chapter, the Americans might well have lost the war. As it was, the news of Franklin's success arrived to cheer them in one of their darkest hours. Franklin, indeed, had won a notable diplomatic victory, and fully de-

served the higher honour which awaited him. In October he was appointed American Ambassador to the French Court, and when, in 1782, the War of Independence came to an end, he was the chief of the American Commissioners who drew up the peace treaty which was signed in Paris on September 3, 1783.

Franklin remained in Paris until July, 1785, then he returned to America, and though he was now close on eighty years of age, he was elected President of the Supreme Executive Council of Pennsylvania in the following October, and held that post until 1788. In 1787 he was one of the four representatives sent by Pennsylvania to the Federal Convention of all the States at which the constitution of the new American nation was drawn up, and he was one of the signatories of the Constitution.

Benjamin Franklin was nearing the end of his long life. He had served his country nobly, and those who knew him remained his friends even though fate may have made them enemies for a time. His much loved wife, Deborah, had died in 1774, and now, on April 17, 1790, he followed her, and was laid to rest in the same grave in the churchyard of Christ Church, Philadelphia. Throughout the civilised world no man was held in greater honour. He had risen by his own efforts to the heights he had attained, harming no one in his rise to fame, and when he died, twenty thousand Americans attended his funeral to show their respect for the distinguished man who had gone.

On his grave-stone is a Latin epitaph which means "He wrenched the lightning from Heaven and the

sceptre from tyrants", allusions to his scientific attainments and to the part he played in freeing his native country. A noble epitaph for a noble man.

GEORGE WASHINGTON

1732-1799

It was the year 1732. In Philadelphia people were already talking about Benjamin Franklin and his clever writings, while, in Virginia, Mary Washington had presented her husband, Augustine, with a baby son. Mary was Augustine's second wife. There were two surviving sons by the first marriage—Lawrence and Augustine—but this little boy, who was later to rival Franklin in fame, was Mary Washington's first child. Both he and Franklin were to serve their country, but there was this difference between them. Franklin would have won fame in any times. From his boyhood this son of a humble soap-maker was determined to rise above his modest beginnings, whereas Mary Washington's son, reared in more comfortable circumstances, possessed no such irresistible desire. His chief wish when he grew up was to be a simple country gentleman, and had there been no War of Independence the world would probably never have heard of him. But war came, and forced him into prominence, and so, almost against his will, he became famous and won for himself a foremost place in the hearts of his countrymen and the history of his country. The name of that boy was George Washington, and this is his story.

George was the great-grandson of John Washington who with his brother, Lawrence, had arrived in Virginia from England in 1658. His family was connected

with the Washingtons of Sulgrave in Northamptonshire and was comfortably off, his father owning two estates in Virginia, one at Hunting Creek on the River Potomac, later known as Mount Vernon, and the other on the Rappahannock opposite Fredericksburg. There the Washingtons lived the lives of Virginian gentlefolk, looking after their plantations, where the labour was done by Negro slaves, riding, fishing and hunting, calling upon each other, and occasionally giving grand parties and balls to which the owners of the neighbouring estates and their families were invited.

It was a happy, luxurious life; yet beneath their fine clothes, their perukes and silk stockings, these Virginian landowners were real men. They lived on the very edge of civilisation, and one had only to travel a few miles westward from the plantations to come upon wild, almost unknown country, where the Red Men roamed obeying no laws but their own, and the traveller might even be in danger of losing his scalp.

Among such surroundings George Washington passed his boyhood. His father died when he was eleven, and thereafter he was brought up by his half-brother Lawrence. He was a fine, upstanding youngster, and at the little country school which he attended he was the acknowledged leader. As a matter of fact, George's education was not a good one. He learned to read and write, but he knew no language except his own, and the only subject at which he was at all clever was arithmetic. Mathematics interested him, and when he left school he continued to educate himself, with the result

that by the time he was sixteen he had a good knowledge of surveying.

It was not long before he found a use for this new knowledge. On the death of their father, Lawrence Washington had succeeded to the Mount Vernon estate, and there George came to know Lord Fairfax, Lawrence's relation by marriage, who owned a vast territory between the Potomac and the Rappahannock Rivers and reaching beyond the Allegheny Mountains. This huge estate was mostly wild, unmapped country, known only to the Indians and trappers, and in 1748 Lord Fairfax gave George the task of surveying his property.

It was a tremendous undertaking for a boy of sixteen, and it proves what trust George aroused in people, even in his youth, that it was offered to him. George accepted the appointment with enthusiasm, and soon with a friend he was out in the forests, measuring and mapping his employer's land. This was a very different life from the one he had so far led. There were no Negro servants to wait on him, no soft beds to lie upon. The two youths had to kill their own food, which they cooked over a wood fire, and at night they lay wrapped in their blankets upon a couch of leaves with the green canopy of a tree or the starry sky as their only roof.

Washington thoroughly enjoyed the life, and on his return, so well had he performed his task, he was made a public surveyor by the Governor of Virginia. Thenceforward, until he was nineteen, Washington spent most of his time in the wilds. He made friends with Indians and learned their ways. He got to know the frontier

trails, and his muscles became like whipcord and his body able to endure hardship and fatigue. He was tall, too, over six feet, and strong, and he was absolutely without fear. In 1751 he went to the West Indies with Lawrence who was suffering from consumption, and there George caught small-pox, the marks of which remained with him all his life.

George was now beginning to attract public notice, and at the age of twenty-one, Governor Dinwiddie of Virginia gave him the military rank of major and despatched him on his first really important mission.

As was explained in the Foreword, the French in Canada were continually striving to extend their dominion in the New World. No great armies were used in this slow occupation. It was done by explorers and parties of soldiers who would nail a tin plate bearing the arms of France to a tree as a sign that the territory belonged to that nation. At first the English took little notice of what was going on, but when about the year 1750 the French began to build forts on the River Allegheny, a tributary of the Ohio south of Lake Erie, they took alarm. The valley of the Allegheny was English territory, belonging to the colony of Virginia, and immediately he heard what was being done, Governor Dinwiddie took action to expel the French.'

This was the task he gave to young Major Washington. It was hoped that a protest would be sufficient, so with a white guide named Christopher Gist, Half King an Indian chief, and other friendly Red Men, Washington set out in October, 1753, to carry Governor Dinwiddie's message to the French commandant at

Fort Le Boeuf, one of the three forts already completed by the French.

It was a tremendous journey. For six hundred miles the way lay through country where every hardship confronted the travellers. The only roads were Indian trails, and for the most part the little party had to force a path through unbroken forest. They climbed mountains where snow and blizzards froze their bodies, crossed foaming rivers and dismal swamps, and so at last they reached their journey's end. There Washington presented Governor Dinwiddie's protest to the French commandant, who, however, replied courteously but firmly that he had been ordered to hold the fort, and that nothing but superior force would make him retire.

Washington had failed, and the long return journey began. Hoping to make better speed, he left all his companions but Gist to follow as they willed, and set out with only the guide to keep him company. At one place he narrowly escaped death from an Indian bullet. It was winter now, and on reaching the Allegheny River the travellers built a raft to carry them across, but the stream was filled with floating ice, and before they were half-way over Washington was thrown into the freezing water. Fortunately he regained the raft, but the drifting floes made it impossible to continue across the river, and the two men passed a bitterly cold night on a tiny exposed island. That was the worst time of the whole journey. There was no wood for a fire, and Washington had to spend the hours of darkness walking up and down in his drenched clothes to keep some warmth in his body. Fortunately the river froze before

dawn, and the next morning the travellers crossed on foot, and finally reached home on January 16, 1754, after having been absent seventy-eight days.

Protests having proved useless, Governor Dinwiddie now made Washington a colonel, and placing him in command of one hundred and fifty men, sent him out into the wilds again with orders to harass the French wherever he met them. He built a tiny fort which he named Fort Necessity, and on May 28 he defeated a French contingent at a place called Great Meadows. But the French were not driven away, and later returned in greater force and besieged him in Fort Necessity. Washington and his men defended themselves bravely, but they were outnumbered. Bullets fell like rain upon the defenders of the little stockade, and at last they were forced to surrender. In such manner began the war between Great Britain and France which was to end with the conquest of Canada and the fall of the French Empire in the New World.

George Washington was soon back in Virginia, but not for long. Britain was preparing for the coming fray, and in February, 1755, General Braddock and several British regiments arrived in Virginia. Washington obtained a position on the general's staff, but he did not like the British officers. They gave themselves airs, and looked upon Washington and his friends as inferiors, both socially and in military training, and in their knowledge of how battles should be fought. No doubt they were right in some respects, but the British did not know how battles were fought in the American backwoods, whereas Washington did.

General Braddock's first task was to destroy the French forts in the Ohio country, and early in June he began his advance. His army numbered thirteen hundred men composed of British regulars, some Virginian militiamen, and a few Indians. The weather was glorious, and the British moved forward through the forest full of the songs of birds and the music of brooks, towards the French Fort Duquesne situated at the junction of the Allegheny and Monongahela Rivers. No one except perhaps Washington and his Virginian comrades ever entertained the possibility of defeat, and as the men marched through the green glades, climbed mountains and forded rivers they sang and filled the air with martial music. In vain Washington told General Braddock that Indian warfare was different from European warfare, and begged him to train his soldiers in Indian methods. The general would not listen, and the British army was close to Fort Duquesne when it suddenly found itself face to face with a combined French and Indian force nine hundred strong.

Now Braddock was to learn the wisdom behind Washington's advice. At sight of the British, the French split in two, and taking cover behind trees and bushes to right and left of the British troops, began to pour in a murderous fire. The British regiments meanwhile had formed up in battle array, as they might have done on an open plain, and bravely sustained the fire of the unseen marksmen. But bravery was not enough. The volleys of the British did little execution, while in their own closely packed ranks the carnage was terrible. Yet

even now Braddock would not admit that he had been wrong, and for three terrible hours he kept his men in the open where they presented an easy target to their hidden foes. Then, with two-thirds of his army dead, Braddock at last ordered the retreat, to be himself mortally wounded as he was about to mount his fifth horse.

The battle was over. Throughout the fight Washington had behaved with conspicuous bravery. Twice his horse had been killed under him, and it was largely due to him that the remnants of the army were saved from annihilation. In recognition of his services, he was made commander of the Virginian forces at the age of twenty-three, and for the next three years he served on the Virginian frontier. Towards the end of this period, in 1758, he was placed in command of the advance guard in a second expedition against Fort Duquesne. This time British arms were successful, and the fort—later renamed Fort Pitt—was occupied and Braddock's defeat was avenged. The same year the war ended in Virginia and Washington resigned his commission, and, in January, 1759, he married a rich young widow named Martha Custis, and settled down on the Mount Vernon estate which had been left to him by his half-brother Lawrence who had died seven years before.

The war between Britain and France was not yet over, and it was not until the following September that Quebec was captured and the fate of the continent decided. Washington, however, took no further part in the hostilities. By his marriage he had become one of the wealthiest men in America, and for the next fifteen

years he and his wife lived at Mount Vernon. These years were the happiest of Washington's life. He became a member of the Virginian House of Burgesses, the State Parliament, but only near the end did he take any prominent part in the quarrel which had sprung up between the colonies and Britain after the war with France. This, as explained in the last chapter, was chiefly due to King George the Third's determination to tax the colonists. The colonists, on their part, refused to pay taxes imposed by a British Parliament in which they had no representatives, and so the quarrel grew until late in 1773 it reached a climax in an event known as the "Boston Tea Party".

Actually it was a trivial thing to provoke a great war. There happened at that time to be a large surplus of Indian tea in England, and the Government of Britain decided that this tea should be shipped to America and there sold, the price of each pound of tea to include a tax of threepence which would yield a fat sum to the British Treasury. It was not a bad plan. The buyers were offered good value for their money, but immediately it was known that the price included a tax, trouble began. To buy the tea, however cheaply, was to admit the right of the British Parliament to tax them, and the colonists would not do this. At New York and Philadelphia the tea ships were sent back to England. At Charleston the tea was thrown into cellars and allowed to rot, but it was at Boston, the capital of Massachusetts, that the real trouble occurred. Three ships arrived at that port, but the port officials refused to listen to the popular clamour that the ships should

carry their cargoes back to England. The Bostonians were equally determined that the tea should not be landed, and kept constant watch on the quays to see that it was not smuggled secretly ashore. So matters remained at a deadlock until late on December 16, when a number of young men, disguised as Indians, suddenly boarded the ships, ripped open three hundred and forty-two chests of tea, and threw the contents, worth twenty thousand pounds, into the sea.

Such was the famous "Boston Tea Party", and immediately the news reached England the wrath of King and Parliament fell upon Massachusetts. Acts were passed closing the port of Boston to all commerce. The rights of the colony, guaranteed by charter, were cancelled in one sweep. Orders were issued for soldiers to be quartered in Boston and throughout Massachusetts, and other measures were taken which it was hoped would break the colonists' spirit.

But in this the British King and government were grievously mistaken. Instead of cowing the colonists, they only strengthened their determination to resist: for it must be remembered that the Americans of that time were mainly men of good English blood and instincts, and like Englishmen all the world over, they could not be bullied into doing a thing they did not like. The result of the acts was therefore to unite the colonies as they had never been united before. As one they rallied round Massachusetts. Food poured into the city lest it suffered shortage from the loss of trade, and Washington even offered to arm a thousand men out of his own purse, and lead them to the help of Boston

if the need arose. King George had made a terrible mistake!

In those days it took several weeks for despatches to pass between England and America, and it was June, 1774, before the law closing the port of Boston came into force. Meanwhile, the colonies had not been idle. Faced with danger of oppression they called a meeting at Philadelphia in September, 1774, where the delegates from all the colonies could discuss together how their common interests might best be protected. This Continental Congress, as it was named, was the first parliament of all the colonies and the forerunner of the present United States Congress, and to it every colony except Georgia sent delegates, George Washington being one of those to represent Virginia.

Though firmly determined to protect their liberties, most of the delegates were still loyal to the mother country, and they parted in October with expressions of fidelity to the King. But events had already gone too far. General Gage and a British army had returned to Boston, but instead of overawing the people as intended, this move had the effect of making them start military preparations of their own. The break came in April, 1775. On the night of the 18th, having learned that a supply of powder belonging to the colonists was at Concord, twenty miles from Boston, General Gage sent Major Pitcairn and a thousand men to destroy the powder and any other military stores they might find. Unfortunately, news of the expedition got abroad, and galloping wildly through the night, a patriot named Paul Revere spread the tidings far and wide that the detested

redcoats were coming. Instantly the countryside awoke. From every cot and hamlet armed men poured forth, so that when the British reached the town of Lexington in the early morning, they found a number of colonial "minute men", so called because of their readiness to turn out at a minute's notice, waiting to receive them. A short encounter followed. Shots were fired, and eight of the colonials were killed, after which the soldiers continued their march to Concord, where a still larger number of armed men stood in their way. The British, indeed, soon discovered that they had entered a hornets' nest, and after a brief engagement they were compelled to retreat without having accomplished their mission. The return journey was a terrible one. From all directions armed farmers had collected in their hundreds, and now from behind every wall and tree they poured a hail of bullets into the retreating British. Soon the retirement became a rout, and when at last the remnants of the force reached their own lines, nearly a third of the men were missing. The first shots had been fired, the War of Independence had begun.

For a few weeks there was a lull. On May 10, 1775, the Second Continental Congress met to consider the situation, and on June 15 Washington was appointed commander-in-chief of the American forces. Two days later the Battle of Bunker Hill was fought. Bunker Hill was an elevation outside Boston, in the possession of the Americans, and on June 17 the British soldiers were ordered to take the position. Two assaults were beaten back by the murderous fire of the defenders, but the third charge, made an hour later, found the defenders

running short of powder, and carried the redcoats over the earthworks, where they attacked the Americans with such fury that they were driven from the trenches. This was the first big battle of the war. On July 3, Washington took over command of the colonial troops at Cambridge, a short distance from Boston, and three days later Congress declared war on Great Britain. The die was cast, and though many of the Congress delegates still hoped to obtain freedom within the British Empire, the day of American independence had actually dawned.

The rest of the year passed quietly. In Boston Sir William Howe had succeeded General Gage as commander of the British forces, while his brother, Lord Richard Howe, commanded the British warships in the harbour. Neither leader, however, showed any enterprise, and Washington was able to proceed with the training of his army unhindered. A hard task it proved to be! There were no regular troops. The men were all militiamen or hastily raised levies without military knowledge, and a lesser man than Washington would have been in despair. But Washington persevered. Gradually he licked his troops into shape, and all through the winter he remained at Cambridge, quietly preparing for the day when he would be able to strike at the foe.

This came in March, 1776. Washington had recently received a welcome reinforcement of cannon and supplies, and immediately he decided upon a bold stroke. Accordingly on the night of March 4, he despatched two thousand men to fortify the Dorchester Heights south of Boston, and, covered by the noise of a vigorous bom-

bardment, the Americans dragged several cannon and their ammunition to the top of the hill, and placed them where they commanded the town and harbour. Imagine the dismay of Sir William Howe when the morning light showed him the American guns in position, and he realised that the town and shipping were at the enemy's mercy.

So ended the siege of Boston. Faced with the choice of surrendering the city or having it and his fleet destroyed about his ears, Howe embarked his troops on the warships and sailed away to Halifax, Nova Scotia, leaving Boston in General Washington's hands.

Washington did not linger in Boston. Knowing that Howe had sailed north, he hurried his army to New York, and while he was there Congress, having at last given up all hope of reconciliation with King George, framed and passed the famous Declaration of Independence about which more will be said in the life of Thomas Jefferson. But Washington was not allowed to remain in New York. Sir William Howe, advancing from Halifax with superior forces, defeated the Americans in a battle on Long Island towards the end of August, and finally forced them to retreat right across New Jersey to the River Delaware.

This was one of the American army's darkest hours. By the time Washington's little force reached Trenton on the Delaware it was December, and its strength had been reduced to under three thousand shivering, half-starved, and ill-equipped men. A less skilful commander would, indeed, have given in then and there, and the War of Independence would have come to an

abrupt end, for the British army was close behind, and in front lay the broad Delaware. But with Washington adversity was merely a spur to added endeavour, and knowing that his army was doomed unless he could get it across the river and prevent the British from following, he ordered his men to seize every boat they could find. This they did, and in the craft so obtained, they started to cross the river. How desperately those shivering, ill-nourished men must have worked! The British were only a short distance away; indeed, the last boats full of men were still in midstream when the advance-guard of the British entered Trenton in hot pursuit. By such a narrow margin was the American cause saved.

Washington had rescued his army, for without boats the British could not reach them, but he knew that immediately the Delaware froze the enemy would be at them across the ice. So Washington decided to strike first. The time was Christmas night. A blizzard was raging, and on their side of the Delaware the British and some German troops called Hessians, which had been hired by King George to fight for him, were sleeping off their Christmas festivities. There had been little rejoicing on the American bank of the river, however. Secretly, Washington had issued his orders, and in the dead of night he and two thousand men embarked and pulled out across the Delaware, already made dangerous by lumps of floating ice. The cold was terrible! Two men, indeed, froze to death, but the rest crossed the river and reached Trenton without the alarm being raised. There the surprise was complete. Rushing in among the sleeping Germans, the Americans

captured nearly a thousand men and killed a hundred more out of a total of thirteen hundred, and all for the loss of two killed and a few dozen wounded.

The Continental army, as the American troops were called, had won its first victory, and General Cornwallis, who had succeeded Howe in command of the New Jersey forces, hastened with several regiments to repair the defeat. But again Washington outwitted him. Leaving his camp-fires burning to deceive the British, he and his army slipped away during the night before the day on which Cornwallis had decided to give battle, and coming upon two thousand British troops at Princeton immediately attacked them. The fighting was very fierce, and at first it looked as though the Americans would break before the bayonet charges of the British. But at the critical moment Washington rode to the front, and recklessly exposing himself to the flying bullets, he rallied his troops and turned defeat into triumph.

This second victory within a fortnight tremendously encouraged the Americans. Cornwallis retreated to New Brunswick, leaving New Jersey to the conqueror, who led his little army north to Morristown and there went into winter quarters.

The American cause had survived one critical hour, thanks to the genius of George Washington, but others lay ahead; indeed, had the British generals combined together in 1777 they might easily have won the war. But the whole campaign of the year was hopelessly muddled. It was a case of the better army being commanded by indifferent leaders, while the less well-trained, well-equipped army was led by a genius and



WASHINGTON ORDERED HIS MEN TO SEIZE EVERY
BOAT THEY COULD FIND AND CROSS THE RIVER

a truly great man, and in the end the great leader won. The year 1777 was marked by two important events. One was the capture of Philadelphia, the capital of the colonies, by the British under General Howe. His success, however, was more than offset by the defeat and capture of an entire British army, which was attempting to invade the States from Canada, at Saratoga near Lake George, by the American general Horatio Gates. This latter victory was especially important, for it enabled Benjamin Franklin, then in France, to persuade the French King to form an alliance with the Americans, and to aid them with men, money and ships as explained in the previous chapter.

This treaty was not signed, however, until February 6, 1778. Meanwhile the winter of 1777-1778 had proved a black period for Washington and his gallant army. It was spent at a place called Valley Forge, twenty miles from Philadelphia, and there in draughty log huts, half-starved, and without sufficient clothing to cover them, eleven thousand men passed the winter months. It was a terrible ordeal. The soldiers' legs froze and went black through exposure. The rough, ill-equipped hospitals were crowded with sick and dying, while hundreds of other men were unfit for service, and lay about in the huts where they were lucky if they had a blanket to cover them.

But even bad things have an end. The dread winter passed, and then, on May 6, 1778; news arrived of Franklin's success in Paris. These joyful tidings put fresh heart into the patriot army, and soon after, General Clinton, who had taken over Howe's command in

Philadelphia, was forced to evacuate the city by the arrival of a French fleet. He decided to move his army to New York, but on the way he was overtaken by Washington at Monmouth, and on June 28 a battle was fought. In this engagement a young French marquis, who had come from France to help the Americans, played a gallant part. His name was Lafayette, and he fought bravely for the States on many occasions, and made himself a great name for courage and other noble qualities. At Monmouth, indeed, he saved the American army from defeat, for at a critical moment, when a body of troops was giving ground, he sent an urgent message to Washington, and the commander-in-chief arrived just in time to stop the rout and rally the retreating soldiers.

Monmouth, however, was an indecisive battle. When it was over Clinton continued his march to New York, where he maintained his headquarters for the next three years, while Washington made camp on White Plains on the east side of the Hudson.

It seems curious, judging by modern standards, that hostile armies should remain within easy reach of each other for three years without coming to blows. Yet such was the case. Washington was never really strong enough to make the attack, while his opponents were content to let matters stand as they were. For having failed to obtain a decisive result in the north, the British now transferred the fighting to the Southern States, where large numbers of the population favoured their cause. Success came quickly. Savannah was captured in December, 1778, and was followed by the complete

occupation of the State of Georgia. In May, 1780, Charleston also fell, and when, on August 16, Cornwallis routed the American forces at Camden it seemed that the Southern States had been lost to the American cause for ever. Then, on October 7, 1780, an event occurred which in a few hours turned the tide of war.

A British force, under Major Ferguson, had gone into the hilly country north of South Carolina to gather recruits among the mountain settlements. What recruits they hoped to secure it is difficult to imagine, for the hardy mountaineers were enemies to a man, and immediately news of Ferguson's mission spread abroad, the call went out for volunteers to resist the invaders. Soon a force of thirteen hundred fighting-men had been gathered. By military standards they were a disorderly rabble. They had no officers, no discipline, but every man was a dead shot, and one and all were filled with a fierce longing to get at the foe. This came about at a place called King's Mountain in the wild frontier region between South and North Carolina.

Major Ferguson had posted his men upon a hill, and having surrounded the British position, the Americans advanced to the attack. Up the hillside swarmed the agile mountaineers, taking advantage of every scrap of cover, while they poured a hail of bullets into the British ranks above them. They in turn were met by rifle fire and bayonet charges which repeatedly drove them back, but the defenders had not the numbers to press their advantage home, while the attackers formed again immediately the charge spent itself, and returned to the assault. Gradually the British resistance weakened.

The deadly fire of the sharpshooters took a terrible toll, and as the defenders' casualties mounted, until several hundreds had been killed or wounded, without any slackening in the fierceness of the attack, they began to lose heart. They were, indeed, in a hopeless position, and when, at last, their gallant leader fell pierced by five bullets, resistance ended, and the remnant of the British force surrendered.

Such was the battle of King's Mountain, and though the numbers engaged were small, it was one of the most important encounters of the war. For it gave back courage to those who were losing hope, and when it was followed on January 17, 1781, by another brilliant victory at Cowpens, enthusiasm flamed up all over the country. So complete, indeed, was the change of fortune that by the summer the British commanders had been forced back to the coast, and of all the territory gained during the last two and a half years, Charleston was the only important stronghold left in their hands.

Meanwhile Cornwallis, having failed in North Carolina, had led his army into Virginia hoping to conquer that colony. There, however, he was met by a small American force commanded by Lafayette, which harassed the invaders so effectually that the British general's grand plan came to nothing. His difficulties were further increased by despatches from General Clinton. Washington at White Plains had recently been reinforced by six thousand French soldiers, and fearing an attack upon New York, Clinton ordered Cornwallis to send him all the men he could spare, while with the

remainder he took up a position on the Virginian coast, and there held out till help could be sent to him. This command Cornwallis reluctantly obeyed, and having despatched the required reinforcements, he retreated to the promontory of Yorktown, where the River James empties itself into Chesapeake Bay, and there retired behind a line of fortifications to await the promised relief.

That relief never came. Clinton had been right. Washington had been contemplating an attack on New York, but before his plans were complete, he learned that a French fleet, under Admiral de Grasse, was proceeding from the West Indies to Chesapeake Bay with twenty thousand troops on board. Instantly Washington changed his plans. Leaving four thousand men to watch Clinton, he led the remaining six thousand by forced marches to Yorktown, having previously arranged to meet Admiral de Grasse there. Thus it happened that, late in August, 1781, Cornwallis, waiting behind his defences on the Yorktown Peninsula, suddenly found himself assailed by a combined French-American army under Washington, while his retreat by sea was cut off by the ships of the French fleet.

So began the siege of Yorktown. Day after day the attackers' cannon bombarded the British works, which crumbled swiftly beneath the incessant hail of cannonballs, and after holding out for some weeks, in the hope of succour which never came, Cornwallis surrendered on October 19, 1781. With him surrendered eight thousand men, while a great quantity of cannon and military stores fell into the victors' hands.

Washington had won a great victory; he had also brought the War of Independence to a successful end. Fighting ceased with the fall of Yorktown, and by the treaty of peace which was signed in Paris on September 3, 1783, Great Britain recognised the independence of the United States, which thus for the first time stood forth before the world as a self-governing nation.

When this happened Washington had already resigned his post as commander-in-chief, and had taken farewell of his army. By his genius and patriotism, his dogged courage in adversity, he had won his country's independence against odds which, had he been faced by a general of equal ability, must have proved overwhelming. He asked for no honours, he would accept no reward for what he had done, all he now desired was to be allowed to retire to his beloved home at Mount Vernon; so the famous man went back to live the life he loved, that of a simple country gentleman.

But even this slight recompense was denied him. Having found a great leader the country would not let him go. The States, which had been united during the war, began to drift apart immediately hostilities ceased. Congress, as then constituted, had no real power. Each State appeared to think that it could go on living the old pre-war life, regardless of its neighbours, and it soon became clear that they had no more desire to obey a central government of their own than they had wished to obey the British Parliament. To such a pass, indeed, did the relationship between the different States come that they levied import duties on each other's produce, and at one time Connecticut and Pennsylvania were

actually fighting each other over some disputed territory in the Wyoming valley.

What a condition of affairs in a nation which a short time before had been fighting for its freedom! Washington and every other patriotic man realised that the country could not continue in this manner, and that a strong central government must be formed, which all the States would obey, if utter ruin was to be averted. So, in 1787, Washington was recalled from Mount Vernon to preside over a great convention in Philadelphia. To this convention every State except Rhode Island sent delegates, and the result of their meeting was the present constitution of the United States of America upon which all the laws and government of that country depend.

The constitution provided that the country should be governed by a President assisted by an upper and lower house of Congress, and as soon as this constitution had been ratified by the various States, it became necessary to elect the first President of the new nation. Who should this be? There was but one name on the lips of almost every citizen, that of George Washington, and so, on April 30, 1789, the man who had guided the thirteen States through the war became the first leader to conduct them along the roads of peace.

Washington was twice President of the United States, first in 1789, and again in 1793, and his supporters wished him to stand a third time, but this he would not do. So in 1797, the great chieftain finally stepped down from his high position and returned to Mount Vernon. There for three years he lived happy and con-

tented, and then, in his sixty-eighth year, he died after a sharp, brief illness.

The whole nation grieved for him, as well it might. Brave, enduring and energetic, upright and honest, "first in war, first in peace, and first in the hearts of his countrymen" as Congress expressed it, his character stands out like a beacon not only before his own people, but before the men of all nations who honour true worth. He had most truly served his country, not for gain, not for honour, but because it was his duty, and having brought her through the dreadful agonies of war he had also set her feet upon the paths of peace. So George Washington came to be called the Father of his Country, and surely no man ever better deserved that honourable title.

DANIEL BOONE

1734-1820

While Franklin was busy with his scientific experiments, and serving his country as a statesman, while Washington was living the life of a Virginian gentleman, or fighting for American independence, a man of an entirely different type was living an entirely different life in the wild frontier regions of the American colonies.

This man was Daniel Boone. He was born in Pennsylvania on November 2, 1734, and when he was seventeen, his father, Squire Boone, moved with his family to North Carolina, where he built himself a home on the bank of the Yadkin River. There Daniel helped his father with the farm, but he did not like the work very much. Farming was too tame a life for young Boone, and whenever he could he took his rifle and powder-horn and sack of bullets, and went off into the forests, hunting and trapping.

Daniel loved this free, exciting and dangerous life. For it *was* dangerous. Apart from bears, and wolves, and cougars, there were always the Indians, who could be more cruel than the most savage beasts. Some Indians, of course, were friendly, but if a traveller happened to fall in with a war-party he most likely lost his scalp, and so the white men who roamed the forests had to be constantly on their guard.

Thus, in the school of experience, Boone learned his

forest-craft. At an early age he became an expert woodsman. He could tell at a glance the tracks of different animals. A crushed leaf, a broken twig attracted his sharp eyes at once, and he read their meaning as an ordinary person reads a book. He knew all about the flight of birds, and any unusual excitement among them carried to him its warning of a possible lurking foe, while the impress of an Indian moccasin in the dust of a forest trail told him how long ago the wearer had passed, whether he was in a hurry or travelling leisurely, the tribe to which he belonged, and many other things.

Little is known about Boone's youth. He was with Braddock as a blacksmith and wagoner on the disastrous march to Fort Duquesne, and ten years later his wanderings took him into Florida. About this time he married Rebecca Bryan, and he and his young wife built a log hut and there set up housekeeping.

Daniel may have been a good husband, but he could not have been a very satisfactory one, for he was continually going off into the wilds, and leaving Rebecca to look after the hut and their baby daughter. In 1767 he visited Kentucky for the first time, and later on, from 1769 to 1771, he spent two years with a party of companions exploring that unknown, untamed region.

They must have been exciting years! Bands of Indians belonging to many tribes were always on the war-path, fighting each other or fighting the white men when they met them, for though no Indian tribes definitely claimed the territory as their own, many wanted it and were always trying to drive the others out.

During this time Daniel Boone and his companions

had many fights with Indians, and more than once their scalps were in danger. Nevertheless, Daniel was thoroughly happy. He knew no fear, and he loved this new country they were exploring, with its luxuriant forests, its glades carpeted with gorgeous flowers, its mountains and valleys, and the great herds of buffalo, the deer, bears, panthers, beavers, and all the countless other animals, the skins of which were enough to make the fortunes of a thousand trappers. He loved, too, the rivers, sometimes tumbling tumultuously along with the leaping spray flashing like jewels in the sunlight, at others forming still, deep reaches stocked with swarms of trout, perch, eels, mullet and many different kinds of fish. They were two fine adventurous years, and all the while Boone was adding to his knowledge of life in the forests, and of the Red Men and their ways.

By this time Boone was famous on the frontier. In 1771 he returned home to his long-suffering wife, but he was soon away again. He could not get Kentucky out of his mind. He wanted to live there, to carve a home for himself and his Rebecca and their little daughter out of the forest, but before he could do that, a way must be found and a road cut along which he and other settlers and their household goods could travel to their destination.

Accordingly, in 1775, he once more said good-bye to his family, and with thirty other pioneers of like mind to himself, he started to make a trail from Watauga on the Yadkin River to the River Kentucky. What a task that was! For two hundred miles these hardy woodsmen laboured day after day cutting a track through forest

and over mountains with their axes, while all the time they had to be on the alert, ready to ~~seize~~ their rifles at an instant's notice and repel an Indian attack. This road was christened the Wilderness Road, and as soon as it was completed, Boone and his companions returned to fetch their wives and children. So Rebecca said good-bye to her log hut, and she and Daniel and their daughter set off along the Wilderness Road taking their few earthly possessions with them. In due course they came to the Kentucky River, and because the situation pleased them, Boone and his companions built a fort there and called it Boonesboro.

A fort was very necessary in that untamed land, for the Red Men were sure to resent the coming of the pale-faces, and would try to drive them away. Indeed, it was not long before the settlers had cause to realise how surrounded they were with foes. It was impossible always to keep near the fort. Frontier life at that period was full of dangers, and the pioneers and their families accepted them as part of the day's work, so there was nothing unusual when one day Boone's young daughter and two friends decided to go for a trip in the forest. The three girls started off, but they had not gone far when some Indians sprang out of the undergrowth, and seizing hold of them hurried them away through the woods. The girls were terrified, but one at least kept her head. She knew that immediately they were missed Boone and other men of the settlement would begin a search, but she also knew that, unless there was a trail for their rescuers to follow, she and her companions might never see their families again. So she set her wits

to work, and as their captors drove them along the forest track, she stretched out a hand every now and then and bent back a twig or broke a leaf off the bushes as they passed. It was not much of a trail, but she had faith in Daniel Boone's keen eyes; unfortunately, before long, one of the Indians saw what she was doing, and drawing his tomahawk, threatened her with death if she did not stop.

Nevertheless, the brave girl was determined to save herself and her companions if possible, and foiled in one direction, she now began to tear tiny pieces off her print dress and drop them on the ground when the Indians were not looking. In this she had better success, and so she laid a trail through the forest for their rescuers to follow.

Meanwhile the alarm had been raised at the fort, and searchers quickly discovered the spot where the girls had been made prisoners. Immediately Boone and several companions took up the trail. The leader's sharp eyes soon detected the broken twigs and leaves and later on the tiny pieces of print dress, and followed them through the woods as easily as another person might follow a well-defined path, and so, late in the evening, the rescuers came upon the Indians and their captives. The Red Men were quite unaware of danger, and were eating their supper round a fire, with the girls lying bound on the ground close by, when Boone and his companions caught sight of them, and creeping near, poured in a volley of rifle shots. The surprise was complete. Two of the Indians were killed outright, while the remainder sprang to their feet with wild screeches



DANIEL BOONE AND HIS COMPANIONS SET OFF ALONG
THE WILDERNESS ROAD

of fright and vanished into the forest, leaving the rescuers to set the captives free and return rejoicing to the fort.

Such happenings as this were common events in early days upon the frontier. Occasionally the captives were rescued, as were Boone's daughter and her friends, but very often they were never seen again, and if they were young women or children the Indians sometimes adopted them into their tribes and treated them as though they were their own people.

This actually happened to Boone in February, 1778. The settlement was short of salt, so Boone and several comrades set out to fetch a supply from a salt-lick one hundred miles away. It seems a long way to go for salt, but there was as yet no such thing as a shop on the frontier. On this occasion the travellers had not gone far before they ran into a body of over a hundred Shawnee warriors. This time the white men were surprised, and almost before they knew what was happening they were prisoners. The Indians were probably not a war-party, for instead of being tortured and scalped, as might have been their lot, the captives were taken to Detroit, on the border of Canada, where all except Boone were released for ransom.

Boone, however, was reserved for what the Indians considered a signal honour. So great was his fame as a frontiersman that the Shawnees decided he was too good a man to be a pale-face, so they decided to adopt him into their tribe and make him a Shawnee.

Certainly Boone did not desire the honour, but he was forced to submit. His head was shaved till nothing but a scalp-lock remained, he was washed in the river to

remove his white blood, and then, with his face painted and his scalp-lock decorated with feathers, he was taken before Chief Blackfish and solemnly admitted into the tribe.

Boone was now a Shawnee. For several weeks he lived with his new brothers, as the Indians called themselves, but he was always on the watch for an opportunity to escape, and when he learned that the Red Men were planning a surprise attack on Boonesboro, his need to get away and warn his family and friends became more urgent than ever. It was now the middle of August, and one morning, before sunrise, Boone crept out of the Indian camp and started for Boonesboro one hundred and sixty miles away. His escape was soon discovered and a party sent after him. But Boone was more than a match for the Red Men in their own forests, and travelling at top speed, with only one meal during the whole time, he reached the fort four days later, in time to warn the inhabitants of the impending attack.

This came on September 8 and lasted nine days. Surrounding the fort, the Red Men tried every wile to capture it. Flaming arrows were shot in among the wooden buildings, and again and again fires were started which were with difficulty put out. Repeated attacks were made by the Indians but all were repulsed. Every person inside the fort lent a hand in repelling the enemy. The younger women and older children loaded the rifles which the men fired. The elder women tended the wounded, and kept the defenders fed, and so the siege continued day after day, until at last, on Sep-

tember 17, having lost numbers of their braves, and thoroughly disheartened by the dogged defence of the pale-faces, the Indians retreated into their forests.

Boone fought many other battles with the Red Men. In August, 1782, he took part in the fierce battle of the Blue Licks on the Licking River. Later, Kentucky then being part of Virginia, he represented the settlers in the House of Burgesses, and he also served as sheriff and county lieutenant.

The latter part of his life was not very happy, however. Through lack of knowledge in legal matters he lost all his land in Kentucky. Later he moved into Louisiana, to a part of that great territory which is now the State of Missouri, but which then belonged to Spain, and received a grant of more land. But misfortune followed him, for when in 1803 Louisiana became an American possession, his right to his land was again questioned, and a second time he was rendered homeless.

Boone lived to be eighty-six. His wife Rebecca had died seven years before, and we read that he went off on a long hunting expedition at the age of eighty-two. He must have been a wonderful old man, and his life was typical of that lived upon the frontiers by thousands of Americans of that time. They were not anxious to tame and develop the country. Indeed, they were unhappy when it became too "civilised" for them, and Boone himself once said, "It is high time to move when a man can no longer fell a tree for firewood within a few yards of his cabin door." Nevertheless, in his way, Boone was a great man. He was not great in the manner

in which Washington was great, but he and others like him were the men who blazed the paths into the wilderness along which the less adventurous of their countrymen might follow, and as such they played an important part in the development of their nation. Boone himself became almost a legendary figure. The stories of his daring, his deeds as an Indian fighter, and his amazing skill in forest-craft spread outside the borders of his country to other lands, and he has been called, by those who know, the most famous of all American pioneers.

THOMAS JEFFERSON

1743-1826

One of the greatest figures of the American Revolution was Thomas Jefferson. His father was Peter Jefferson, a Virginian surveyor and member of the House of Burgesses, who married a Miss Randolph, a young lady of a prominent Virginian family, and to them baby Thomas was born on April 13, 1743.

Thomas must have been a bright boy. He was certainly a very bright young man, for although he was not yet twenty when he left the College of William and Mary at Williamsburg, where he had completed his education, he could understand and speak French, Latin and Greek, as well as being a clever mathematician. He was, indeed, to become one of the cleverest men in America, for unlike the majority of people, he did not stop learning when he left school. He went on teaching himself, and presently added Spanish, Italian, and a little German to his list of languages. But that was not all. So many things interested this young American that it is a wonder he found time for them amid all the other duties of his life. He studied zoology and botany and distinguished himself in both sciences, he excelled at sports, he was an accomplished musician, and in time he became the foremost architect in America.

With so many accomplishments, so many interests to occupy his hours, one would think that Thomas Jefferson had no time for other work, but these pursuits might

almost be said to be the employment of his leisure. His father had died in 1757, when Jefferson was fourteen, leaving him a small estate of some two thousand acres and fifty Negro slaves, with an income of £400 a year. He was thus quite well off, but he continued at college until he was nearly twenty, and then he went into a lawyer's office, as though he had not enough to do with an estate to manage and all his other interests, and began to study law.

One of Thomas Jefferson's most praiseworthy qualities was his thoroughness. He never did things by halves. After five years of hard work he was admitted to the American bar, and became a fully-fledged lawyer, but he was still not content. Having undertaken to study law, he determined to do it properly, and besides the laws of his own country, he made himself acquainted with those of Great Britain and other European nations, until in all America there was no one who knew so much about law and laws as Thomas Jefferson.

What a splendid training for a man who was to become one of his country's law-givers! Entering the public service first as a justice of the peace he was elected to the Virginian House of Burgesses in 1769, and remained a member until 1775. Meanwhile, in 1772, he married a handsome young widow named Martha Wayles Skelton and took her to his home on the family estate. There she had a great welcome, for Jefferson was not one of those landowners who used their slaves cruelly. Like Washington, another owner of slaves, he believed that all men should be free, whatever the colour of their skins, but he realised that the

time to free the Negroes had not yet come, and that his slaves would be far more unhappy if they were suddenly cast masterless upon an unsympathetic world than if they remained in contented servitude on his estate.

So Jefferson kept his Negroes and continued his studies. He managed his estate and attended the meetings of the House of Burgesses, and also found time to live a happy married life. There could not have been many wasted hours in Jefferson's days, and now the time was approaching when he was to be called to do still more important work.

It has already been described how the War of Independence began in April, 1775, three years after Jefferson's marriage. On May 10, 1775, the Second Continental Congress, already mentioned in the chapter on George Washington, met to discuss the serious state of affairs. Many great men were present: Franklin in his seventieth year and famous in two continents; John Adams who was destined to be the second President of the United States; George Washington, still unknown outside his own country; and a tall, large-boned young man with sandy hair, ruddy complexion and grey eyes, whose eager, clever talk and frank and earnest manner charmed all who met him. This last was Thomas Jefferson. He had been chosen as one of the delegates to represent Virginia at the Congress, but as yet and for some months to come, even though shots had been fired, there was little talk among the colonial representatives of independence. So long as they could obtain their just rights, the colonists were ready to remain within the British Empire, and it was only when King George

refused to consider their appeals, declared them rebels, and began to hire German soldiers to fight against them that the people of the New England States gave up hope of reconciliation. George III was determined that they should be his obedient subjects, whether they liked it or not; they were equally determined to be free, and so there was nothing to do but to fight, and fight on until they had been crushed or independence had been won.

So we come to the Declaration of Independence, a document rivalling our own Magna Carta as a foundation upon which rest the rights and freedom of a mighty people. Having realised that a break with Britain was inevitable, Congress desired to place the American case before the world. Accordingly Franklin, John Adams, Roger Sherman, Robert R. Livingston and Thomas Jefferson were chosen to draw up the Declaration, and because he possessed the gift of clear and forceful language, Jefferson was given the task of writing the historic document. This he did almost unaided by his companions, stating in brief, passionate sentences how King George had misruled the colonies, and had acted more as a despotic tyrant than as a benevolent king, and going on to declare that thenceforward the colonies would no longer obey him or owe him allegiance; but would rule themselves as a free and independent people.

Such in brief was the meaning of the famous Declaration of Independence the words of which flowed from Jefferson's ready pen in that fateful summer of 1776. "We hold," he wrote, "these truths to be self-evident, that all men are created equal, that they are endowed

by their Creator with certain unalienable rights, that among these are life, liberty, and the pursuit of happiness. That to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed. That whenever any form of government becomes destructive of these ends it is the right of the people to alter or to abolish it . . .”

So Jefferson wrote, and on July 4, ever since held as a national holiday throughout the United States, the Declaration was accepted by Congress, and immediately riders were despatched in all directions bearing the great news. As the tidings spread, from every steeple and tower in town and village bells began to ring forth, and soon, from one end of the country to the other, the joyous peals were proclaiming that a new nation had been born.

Thomas Jefferson had performed the most famous act of his life, though many years of useful service to his country lay before him. He took little share in the war which followed. In 1776 he returned to the Virginian legislature, and for two years he worked hard revising the laws of that State. In this work his deep knowledge of the laws of other countries helped him immensely, and within two years he and those who assisted him drew up recommendations for one hundred and twenty-six new laws, and practically gave Virginia a fresh legal system.

In 1779, when he was only thirty-six, Jefferson became Governor of Virginia, resigning that post in 1781 and again becoming a member of Congress. After the peace he served his country in various ways. It was he,



THOMAS JEFFERSON SIGNS THE DECLARATION OF
INDEPENDENCE

for instance, who devised America's decimal system of coinage with its dollars and cents. In 1784 he went to France to assist Benjamin Franklin, and from 1785 to 1789 he succeeded Franklin, and was American Ambassador to the Court of France during the stormy years before the French Revolution, of which he saw the beginning. He was Secretary of State in President Washington's first cabinet, and it was here that he began his struggle with his great rival Alexander Hamilton (1757-1804). These two brilliant men were utterly unlike each other in personality and opposed in politics. They resembled Pitt and Fox or Gladstone and Disraeli in English history, and the schools of political thought for which they stood are still represented in the Democratic and Republican parties which have fought for supremacy in American politics ever since.

John Adams had followed George Washington as second President of the United States. In 1801 Jefferson succeeded Adams in that high dignity, and it was during his term of office, and thanks to his keen brain, that there was accomplished one of the most amazing land purchases ever made. It happened in this manner.

At that time the United States of America covered less than a third of the territory it occupies to-day. The country ruled over by Washington and Adams, and by Jefferson, when he first became President, extended from the Atlantic coast to the Mississippi, and from Canada to Florida and the shore of the Gulf of Mexico. Florida was at that time a Spanish possession, and so was all the vast territory south of Oregon and west of the Mississippi, including the whole of Mexico.

The part of this immense Spanish colony which was the immediate neighbour of the States was known as Louisiana. It lay between the Mississippi and the Rocky Mountains, between Canada and the Gulf of Mexico, and covered an area of 875,000 square miles, forming a country greater in size than the whole of the United States at that time. Now so long as Spain controlled the western land the States had nothing to fear, but in 1800, Napoleon Bonaparte, then master of France, forced Spain to make him a present of Louisiana. The matter was kept secret for some time, but gradually the news leaked out, and when the States discovered that France and her fire-eating Emperor were to be their future neighbours, Jefferson took immediate alarm.

There was cause for alarm, too, for Napoleon was said to be dreaming of a great colonial empire in America. Moreover, the free navigation of the Mississippi and the use of the port of New Orleans at its mouth was absolutely necessary to the American settlers west of the Allegheny Mountains. Down the river they carried their produce of sugar, tobacco, cotton and many other things, and from New Orleans, which the Spaniards had allowed them to use, they shipped their merchandise across the oceans of the world. But Napoleon might not be so accommodating. He might refuse to let the Americans use the port of New Orleans, and so ruin their trade, and in his own mind Jefferson felt certain that that was what Napoleon intended to do.

What was to be done? If Napoleon sent a French army to America and closed New Orleans to the Americans, there would be danger of war, and war was the

last thing the country desired. There was a way out, however. If the States could buy New Orleans from France, the settlers west of the Alleghenies would have the port they needed, and the chief cause of a possible quarrel would be removed. So Jefferson reasoned, and accordingly he sent James Monroe to Paris with orders that he and the American Ambassador, Robert R. Livingston, should do their best to persuade the French Emperor to sell the city of New Orleans to the United States for two million dollars (£400,000).

Jefferson must have been very doubtful whether Napoleon would accept the offer, but now, unknown to him, other circumstances were working in his favour. France was again on the brink of war with Great Britain, and the French Emperor had neither the men nor the money to expend on Louisiana. Moreover, he was urgently in need of funds to maintain his armies in Europe, and so, when the American envoys approached him with their suggestion, he amazed them by offering, not New Orleans alone, but the whole of Louisiana for twenty million dollars, roughly four million pounds.

What a stupendous offer! For twenty million dollars—actually after some haggling the amount was reduced to fourteen and a half million—the United States was offered nearly one million square miles of new territory, almost five times the size of France itself. The American envoys boldly accepted the offer without waiting for instructions from home, and the Louisiana Purchase Treaty, which they signed on May 2, 1803, was promptly confirmed by Thomas Jefferson, who thus doubled the size of his country with a stroke of his pen.

Such was the second great national achievement of Jefferson's life. The next year he sent two young men, Meriwether Lewis and Captain William Clark, to explore the new territory, but the story of that famous expedition is reserved for a separate chapter. Jefferson served two terms as President, retiring into private life on March 4, 1809. But though he was no longer the ruler of his country, such was the esteem in which he was held by his fellow men that he still exerted a great influence behind the scenes; and Madison and Monroe, the Presidents who succeeded him, invariably sought his advice on great questions of state.

Jefferson was now getting old, but age seemed to have no effect upon his faculties. He was already a famous architect, and in his late seventies he drew the plans and superintended the building of the University of Virginia at Charlottesville, which is to-day a visible memorial to his genius, and the most beautiful of all American universities. The University, which was opened in 1825, was the great man's last important work. The following year Thomas Jefferson died, passing away, appropriately enough, upon July 4, 1826, the fiftieth anniversary of his famous Declaration of Independence, by which he will ever be remembered so long as the United States endures.

MERIWETHER LEWIS

1774-1809

WILLIAM CLARK

1770-1838

This is a story out of the lives of two young Americans who set out to explore a continent.

It was Thomas Jefferson who began it. Long before he became President of the United States the great unknown west land between the Mississippi and the distant Pacific Ocean had laid its chains upon his imagination. What wonders did that vast territory contain? Wandering Indians whispered tales of the Shining Mountains, mountains so high that they touched the sky, of herds of buffalo so immense that they reached to the horizon and beyond, and numberless other marvels, but were these stories true, or were they just exaggerated pictures conjured up by their savage, untutored minds? Jefferson longed to know. He longed to send out brave, strong young men to unveil the mysteries of that unknown land, to blaze a trail from one side of the continent to the other, but for many years these yearnings could be nothing more than dreams, for the country he wished to explore belonged to another nation. Then one day he became President of the United States, and later on, with the purchase of Louisiana from the French Emperor Napoleon, all difficulties were removed, and the way lay clear for him to put his dream project into execution.

This was in the year 1803. The Louisiana Purchase Treaty had been signed in Paris on May 2, and a few weeks after it had been ratified by the United States Senate and House of Representatives, Jefferson applied to Congress for money to equip an expedition to explore the great new land which had so wonderfully become part of the United States. Nor was he content that the exploration should be confined to Louisiana, for, fired by the greatness of his vision, he added, "And let us search out even that which lies beyond."

Probably few of the members of Congress saw the great western land with Jefferson's eyes. To most of them it was a savage wilderness which had not changed in ten thousand years, and would continue as it was for another hundred centuries to come, for it seemed impossible that the population of the United States could ever become large enough to people that immense territory. Nevertheless, they granted Jefferson's request and voted twenty-five hundred dollars (£500) to finance the expedition. That matter settled, Jefferson set to work to select the men who were to carry the Stars and Stripes into the unknown.

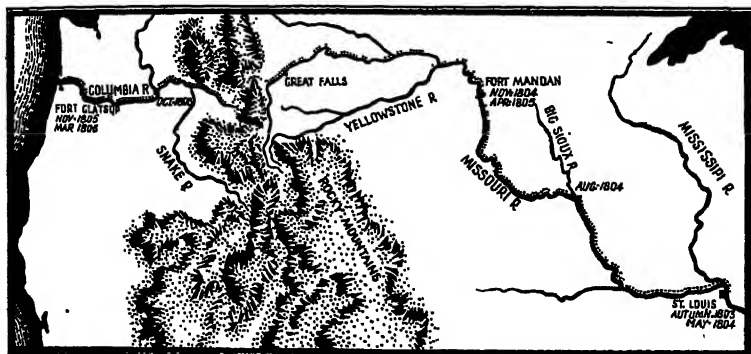
Men of courage and determination were needed, for there was no reckoning what frightful difficulties the travellers might have to meet, and knowing no one who possessed these qualities better than his own private secretary, Meriwether Lewis, Jefferson chose him to lead the expedition. Lewis was twenty-nine years old. He was a captain in the army, and his strong, pugnacious jaw and piercing grey eyes gave the key to his dour, dogged nature which no difficulties were likely to daunt.

Having selected the leader, Jefferson left it to Lewis to name his own second-in-command, and he chose his best friend, a red-faced, red-headed, always cheerful captain of artillery named William Clark. Clark was popular with everyone, and got on especially well with Indians, an accomplishment which was likely to prove useful during their travels. So while Lewis bought arms and ammunition, food, and coloured beads and other trinkets for presentation to the Red Men, to Clark fell the task of picking the men who were to form the body of the expedition. These numbered twenty-seven in all, the youngest of the party being John Colter, a boy of sixteen, while the eldest was an Irishman named Patrick Gass, a veteran of thirty-three.

Such was the little band of brave, adventurous men who gathered at the mouth of the Missouri River, the great tributary of the still greater Mississippi, in the autumn of 1803. There they spent the winter strenuously training in a camp near St. Louis, and then, on May 14, 1804, they embarked in two long row-boats and a large bateau, a kind of flat-bottomed boat, and with final good-byes to the few people who had collected to see them off, set forth into the wilderness.

The explorers' plans were simple. They were to go westward, and as the Missouri flowed from that direction they planned to follow it to its source, or at least as far as it was navigable, and after that to go straight ahead till they reached the sea. A simple programme, and if the path in front of them had been equally straightforward, their task would have been easy. At first, indeed, the journey did resemble a prolonged

pleasure trip. Day after day they paddled up the broad river between banks clothed with groves of cottonwood, cedar, willow and walnut trees. Game was abundant. Never before had any of the travellers seen so many antelopes, goats, elks or buffaloes. These last roamed the plains in great herds, and so vast were their numbers that fifty or more herds were sometimes counted in one day. They met Indians, but these were usually friendly,



and grunted with amazement and delight when Lewis or Clark presented them with strings of gaudy beads, or pieces of coloured calico, or showed them their painted faces reflected in a cheap mirror. And at the end of each day's work there was a comfortable camp with plenty to eat, and while the men sat round the fires yarning, as travellers do, Lewis and Clark wrote in their journals an account of that day's happenings, of the country through which they had passed, the Red Men they had met and conversed with, and of the animals, trees and plants they had seen.

So they travelled for three months. By that time they were nearly nine hundred miles from their starting-point, and had reached the spot where Sioux City, Iowa, now stands. It was August, and the heat was intense. The men began to complain of pains and illness. One man died of colic, another went down with sunstroke. Work became harder, too. The bed of the river grew shallower and was obstructed by numerous sandbanks on which the bateau was constantly running aground, and from which it had to be pulled off into deep water.

But still they pressed doggedly forward. As the boats travelled up the river, scouts went ahead of them along the banks, for not all the Indians were friendly, and Lewis was taking no risks. Nor were the dangers confined to hostile Red Men. On one occasion a scout was lost and was almost starved to death before he was found by his companions, while another time Lewis, on the same duty, was nearly caught and trampled underfoot by a herd of stampeding buffalo.

Meanwhile, the company had been increased in numbers by the addition of a half-breed named Tous-saint Charbonneau, whom they had come across during their journey up river, and his young Indian wife, Sacajawea the Bird Woman. Sacajawea was a girl of nineteen, and there was a story attached to her. She was the daughter of a chief of the Shoshones, a tribe of Indians living among the western mountains, and at the age of thirteen she and some other girls had been taken prisoners by a hostile tribe and carried away into captivity. From these new masters she had in time passed into the possession of Charbonneau, who made her

his wife. Then Lewis and Clark met the pair and Charbonneau wished to join the party, but at first the white men were doubtful about the wisdom of accepting their company. Charbonneau with his knowledge of the Indian languages would be invaluable as an interpreter, but was it right to burden themselves with a girl? Would she be strong enough to stand the journey? True, she was an Indian and used to hardships; moreover, she belonged to a tribe through whose territory they would presently be passing, and besides her usefulness as a guide, her presence might ensure them a friendly reception from the Red Men. It was these last reasons which decided Lewis and Clark to add a woman to their number, and it was a decision they were never to regret. Indeed, Sacajawea became the good angel of the expedition, for she mothered the explorers, cooked for them, tended their hurts, and later on proved their saviour in the most critical moments of the journey.

Autumn was now approaching. Rugged hills and rocky plateaux had taken the place of the plains and woodlands on the lower reaches of the river, and to the weary travellers it seemed that they were farther from their goal than ever. As yet they had not even glimpsed the Shining Mountains, those mythical peaks which lay between them and the western ocean, and was it possible that they could cross them and reach the sea that year? It was not. November and the first snows found them sixteen hundred miles from the mouth of the Missouri, near the place where the city of Bismarck, North Dakota, now stands, and there Lewis decided they would halt and spend the winter.

So the explorers unloaded their boats and pulled them ashore. Then they set to work to fell trees, and with the logs thus obtained they built huts and surrounded them with a stockade. When they had finished, they called the place Fort Mandan after the friendly Mandan Indians who inhabited the surrounding country. Meanwhile, hunters had been scouring the forests for game, the frozen carcasses of which would supply them with food during the months ahead. Others of the travellers had been cutting great stores of fuel for firing, and so, by the time the cold weather began in earnest, Lewis and his companions were well provided to withstand the rigours of a winter in the wilderness.

That winter was passed in a land where no white men, except perhaps a few trappers, had ever been before, and the chief event of those long months was the birth of a baby son to Sacajawea. The explorers spent five months at Fort Mandan, and how eagerly they must have awaited the coming of spring and watched the slow melting of the ice. The river was much narrower and shallower here than it had been in the lower reaches, and as they took stock of their shrinking stores, Lewis and Clark decided that they would make quicker progress without the heavy, clumsy bateau which had caused them so much trouble towards the end of the previous season. So they set the men to work on six canoes to take the bateau's place. These canoes were made out of buffalo skins mounted on a framework of willow branches, and by the time the last ice-floes had disappeared down the river, everything was ready for the fresh advance.

This began on April 7, 1805. No doubt the long rest had done the explorers good, but travelling was much harder now than it had been at the beginning of the great adventure. Their clothes and moccasins were showing many signs of rough wear, and as they paddled up the river, the country on either side of them became increasingly savage and inhospitable. Game, too, was less plentiful than before, and the hunters had hard work to keep the pots filled. Indeed, the only creatures of which there were more than enough were the mosquitoes, which appeared to the travellers to take a ferocious pleasure in searching out every bit of uncovered flesh.

The journals of Lewis and Clark paint a graphic picture of their travels in this second year of their journey. They tell no more of herds of buffalo, but instead we read of immense grizzly bears which on several occasions attacked them with savage ferocity, and were not killed until several bullets had been fired into their bodies. As they progressed the explorers passed the mouths of many streams, one of these on the left being the Yellowstone River, the Missouri's largest tributary, with which some of them were to become better acquainted on the return journey. Presently they came to a place where the river forked, and took the southerly branch, and so they paddled on, day after day, until they found their further progress barred by a series of thundering cataracts.

They were the first white men who had ever seen those cataracts, and they named them the Great Falls. And great, indeed, they proved to be. To force the

boats up the cataracts was impossible, and so there now began many days of heart-breaking labour. Everything they possessed, canoes, boats, and all their stores, had to be carried on their backs over miles of rough country to the calm water above the falls, and no sooner was one journey completed than they had to return and begin another. It needed men strong in will and body to accomplish such a task, but at last the long portage had been completed and the journey up river began again.

Now the current ran more quickly, for they were nearing the mountains, and at length, on May 26, Lewis returned from a scouting expedition with the news that he had seen glistening, snow-clad peaks far ahead. At last they seemed to be getting somewhere. Everyone was excited. Mountains! They must be the Rocky Mountains, the Shining Mountains of the Red Men's stories. With renewed eagerness the explorers pressed forward. Each day the mountains rose higher in front of them. July 4, Independence Day, 1805, came, and they were 2500 miles from St. Louis, and now the mountains seemed to be right overhead. Where were they? Where were they going? No one knew unless it was Sacajawea the Indian girl, who throughout the journey had carried her baby son strapped to her back, and had borne the hardships and toil as unflinchingly as the strongest among them. Did she know? Lewis believed they were nearing the country of her people, and now, in this uncharted wilderness, he turned to her for guidance. The girl looked about her and signified that they should go forward. So on they went

and presently they came to a place where the Missouri divided into three branches. Which way now? There might be one right way and two wrong, but which of those three was the right road for them to take? Again Lewis appealed to Sacajawea, and after some thought the girl pointed up the right-hand branch, so they turned their leaking craft into it and plunged on into the unknown.

Now hardship began to pile on hardship. The explorers were well among the mountains, and the Jefferson River, as they named the stream up which they were travelling, flowed through deep canyons where the water creamed and frothed angrily against the black, forbidding walls which in places fell sheer into the river. The current was swift, too, so swift that often the men were unable to propel their craft against it, and they were forced to disembark and drag the laden boats upstream by means of ropes. This was terrible, exhausting toil. Sometimes the travellers were able to trudge along the rocky shore, but more often the banks were too steep to give them foothold, and then the weary men were compelled to wade through the water which dragged at their limbs and bodies until every forward step was a battle. And the cold! Even in summer the water of the Jefferson was cold with the numbing chill of the glaciers from which it came, a chill which bit into the explorers' drenched and aching bodies and robbed them still further of their waning strength.

These were anxious days for Lewis and Clark. They knew that they could not go much farther under such conditions. If they were to cross the mountains before

winter set in again they must have horses to carry them, otherwise they must return with their mission unaccomplished or risk almost certain death amidst the snow and ice of those high altitudes. But where were the horses to come from? There was only one source, the Indians, but they had seen no Indians for weeks, though Sacajawea, when appealed to, insisted that they were in the country of the Shoshones, and that on more than one occasion she had seen smoke in the distance which she said came from the signal-fires of her people.

Still day followed day without any sign of help. Mountain piled on mountain till there seemed to be no end to the towering peaks with which they were surrounded, and at last, as a final resort, Lewis decided that he must go on in front and try to find assistance for his companions. It was the only thing left for him to do. If he failed, then they must turn back. So one morning, with three of the strongest of his comrades to accompany him, he pushed on ahead, leaving the remainder to follow at the best pace they could muster.

On, on; higher and higher. Each morning Lewis and his companions set out with renewed hope that that day they might find help, each evening their hopes were dashed to the ground. They reached the Continental Divide, where instead of sloping to the east the ground began to slope westward towards the Pacific, and there planted the American flag. What did those four ragged, weary men think about, we wonder, as they stood gazing towards what was to them the Promised Land? Were they full of jubilation and hope? There was some

jubilation perhaps that they had endured so much and come so far, but the flame of hope must have been very faint. Since they left their friends they had not seen a single human being, they might indeed have been alone in that wilderness of rock and snow, and their supply of food was very low. They had that day, we are told, just two pounds of flour left.

Nevertheless, Lewis and his companions had not yet reached the point when they were ready to confess themselves beaten, and having planted the flag, and gazed their fill upon the scene ahead, they went on again. And then suddenly Fortune, which is said to favour the brave, turned her face and smiled upon them. It was August 13. The time was afternoon, and the four white men, almost at the end of their tether, were toiling up the Lemhi Pass when all at once an Indian horseman came into sight riding towards them over the crest. He was followed by fifty others, and reaching the travellers the party halted and the chief and Lewis exchanged greetings. The travellers learned that the Indians were Shoshones and the chief's name Cameahwait. The Red Men proved friendly, and noticing how weak the pale-faces were, they then and there cooked a meal and fed them from their own small store of food. How wonderful that meal must have tasted! In Lewis's journal we are told that they were given roast salmon to eat, and when hunger was satisfied, Lewis explained as best he could what they were doing there. The position of the companions they had left behind was also described, and before very long knives and beads and other things precious to the Red Men had been exchanged for

horses, and the animals were on the way back to bring up the remainder of the party.

The expedition had survived one crisis thanks to the friendliness of Cameahwait, and when the main body of the explorers arrived bringing with them Sacajawea, and the Indian girl recognised in the chief the brother from whom she had been stolen seven years before, Cameahwait could not do enough for the white men. But there was little time for lingering. A few days' rest was allowed for recuperation and then the party had to go on again, for they were still among the mountains, and they must be far away when winter came.

Sacajawea might have remained with her tribe, but she decided to follow the fortunes of her husband and the expedition, and so, when the explorers resumed the journey, the Indian girl went with them. Now the way lay through a jumble of mountains and valleys among which they were constantly losing themselves. There were no paths, no trails. Food began to run short again, and at last the situation was so desperate that they were forced to kill some of the horses and eat their flesh. But still the travellers struggled on, urged forward by Lewis's grim unyielding determination to succeed, and the cheery presence of Clark who was always ready with a laugh and a joke. They climbed passes where the early snow was even then beginning to gather. They skirted precipices, descended gloomy valleys where the ground was so barren that the starving horses found nothing to eat, until at last both men and animals looked more like a company of walking skeletons than living, breathing creatures.



LEWIS AND THE INDIANS EXCHANGED GREETINGS

But now at length, after weeks of cruel toil, the country was becoming more friendly, the surrounding heights less overwhelming, until there came a day when, footsore and weary and weak, they reached the open country west of the mountains and found themselves on the banks of the Clearwater River. There they made camp, and now Lewis, who all through the terrible journey had never spared himself, whose relentless energy had often compelled him to do the work of two men, fell ill. So Clark carried on. While the leader was out of action, he set the men to make boats by the simple process of cutting pine logs and hollowing them out with fire. They were rude, clumsy craft, boats such as our ancestors made thousands of years ago, but they floated, and as soon as Lewis was well enough, they packed all their remaining possessions on board and set off down the Clearwater. This in due course led them into the Snake River, from which, one day in the middle of October, they emerged into the broad and magnificent Columbia. Now their troubles were behind them. For twenty-one days they followed the course of the majestic stream, which grew wider and wider as they proceeded, until one morning—it was November 7, 1805—they became aware of gulls wheeling above them, and looking ahead, they caught sight of a vast expanse of water which stretched on and on before them until water and sky met on the far horizon. It was the Pacific Ocean! They had reached their journey's end at last.

If you look at the map at the end of this book you will see a place named Astoria marked at the mouth of the Columbia River, and it was close to this point that Lewis

and his companions built huts of logs and surrounded them with a stockade. They called the place Fort Clatsop, and there, 4100 miles from the point at which they had started their long trek across the continent, they spent the second winter since leaving St. Louis.

They stopped at Fort Clatsop until March 23, 1806, and then the journey home began. But now they knew the way, they were not walking almost blindly into the unknown. Guided by Lewis and Sacajawea they passed through the mountains in safety, and then the party divided, and while one half under Clark explored the Yellowstone, the other, commanded by Lewis, traced the course of Maria's River. The two parties met again at the mouth of the Yellowstone on August 12, and thereafter they travelled swiftly down the Missouri, reaching St. Louis on September 23, 1806. They had done in six months a journey which had taken a year and a half on the outgoing way.

What good did the expedition do, you may ask? Well, someone had to make a beginning, and Lewis and Clark and their companions were the first explorers to cross the continent of America north of Mexico. They blazed the trail! The reports they brought back of the country through which they had passed, the Indian tribes they met, and the animals and plants they saw, contained the first authentic knowledge of the mysterious west land, and opened the gates through which others were not slow to follow.

Merely as a feat of courage and endurance the journey was remarkable, for in all the eight thousand miles of unknown country which they had traversed, the ex-

plorers lost but one man. Lewis and Clark and their companions were hailed as heroes, and were all rewarded with liberal grants of land. Lewis, moreover, was made Governor of Louisiana, while Clark was promoted to the rank of Brigadier-General and was made Indian agent for the same territory. So ended the Lewis and Clark expedition, the greatest journey of exploration ever undertaken on behalf of the United States of America.

JOHN FITCH

1743-1798

ROBERT FULTON

1765-1815

In the month of January, 1743, at Windsor in the State of Connecticut, a son was born to a farmer named Fitch. The baby was christened John, and as he grew to boyhood, he received the usual scanty education of a poor boy of that time. John was a clever, adventurous lad, however. He had no liking for a farmer's life, and at seventeen he went off to be a sailor. But he soon tired of a sea life, and after a few voyages, he gave it up and became a clockmaker and later on a silversmith. Then came the War of Independence. John Fitch did not fight. Instead he became a sutler, and as such he followed the American troops, selling food, drink and other commodities to the soldiers and making a small fortune in the process.

With this money Fitch bought himself land in Virginia, and sometime or other he must have taught himself surveying; for we next hear of him as surveyor for Kentucky. Later on, when the war was over, he went exploring in the north-west regions, his idea being to make a map of that huge, unknown country. There was no easy travel in those days. Much of Fitch's journeyings on this occasion was performed in a canoe, and as he toiled up the rivers, often paddling against the current, the idea came to him how much easier life would be for

travellers if boats were driven by steam instead of by tired and aching muscles. So Fitch had his famous idea, and returning from the wilds, he set about turning it into reality. Few people, however, had any faith in him, and he had great difficulty in getting the necessary help, but at last, in 1786, he succeeded in forming a company, the first steamship company in America, and soon after, a steamboat, built by Fitch, was launched on the Delaware.

It was a notable occasion, this launching of the first American steamship upon an American river. Crowds of people lined the banks, gazing in wonder at the novel sight, and among them were Washington and Franklin. Unfortunately, the first steamboat company was a failure. For some time the boat plied between Philadelphia and Trenton, but the undertaking did not pay and the company came to an end.

To Fitch, therefore, belongs the real credit of having invented the steamboat, though he could not arouse sufficient public interest in his invention to make it a success. And now we must leave John Fitch, and turn to another boy whose beginnings were very similar.

Robert Fulton was also the son of a poor farmer, who died when he was three. Like Fitch he had only a scanty education, and also like Fitch, he was clever enough to overcome this defect and do something with his life. Some special quality must have been evident in the boy, for when quite young he was apprenticed to a jeweller in Philadelphia. A good jeweller must also be an artist, and this Robert quickly proved himself to be, but not in gold and silver work. Very soon we hear of

him painting portraits, especially miniatures, and landscapes, and by the time he was twenty-two he had made enough money to buy a small farm for his mother and to pay his passage to England, where he went to study under the great American painter Benjamin West.

With West's help and encouragement Robert soon rose in the world. In England he won the friendship of three great men. One was the Duke of Bridgewater, the originator of British canals. The second was the Earl of Stanhope, a man of science, and the third was the famous Scottish engineer, James Watt, who invented the modern steam engine. With three such friends, it not surprising that Robert began to lose interest in painting in favour of engineering, and presently we hear of him studying the construction of canals, building bridges, and inventing various useful machines.

So it happened that in due course Robert Fulton became a fully-fledged engineer, and now his great ambition was to build a steamboat. As a boy he had watched Fitch's ship steam up the Delaware, and the story is told how, in his youth, he invented a pair of wooden paddle-wheels and fitted them to an old flat-bottomed boat in which he and his playmates went sailing and fishing upon the river near his home. This had proved to be a much easier way of propelling the boat than the usual method of pushing her along with poles, for Robert had fitted the wheels to a crank, and all the boys had had to do was to sit in the boat and turn the crank, and they could go where they liked.

These sights and doings of his boyhood must have

often filled Robert's mind, and he argued that if he could put larger wheels to a larger boat, and cause them to be turned by steam, then that boat would move, just as the old scow had done in bygone days.

So Robert dreamed, but he had other visions besides these. One concerned a boat which would move about under water. It was to be a war-boat, a boat which could creep about below the surface and destroy an enemy fleet unseen. But where should he build it? Fulton gave the matter much thought, and perhaps because Napoleon, who at that time was master of France, was so fond of war, Fulton decided to cross the Channel and build his submarine there. Accordingly he left England and went to live in France, and by 1801 the *Nautilus*, as he had christened his new invention, was completed and ready for trial. This took place in Brest harbour. An ancient sailing vessel had been given to Fulton for the purpose, and on the appointed day, before a number of officers sent by Napoleon to witness the trials, the inventor went on board the *Nautilus* and sank beneath the water. There, by means of a screw worked by turning a crank, he navigated his strange boat until he was below the target vessel. To her he then fastened a tin of gunpowder which in due course exploded, blew a great hole in the ship's hull, and sent her to the bottom.

Fulton's experiment had proved a complete success; yet Napoleon was not impressed by this new way of waging war at sea. Perhaps he doubted his ability to find crews for such dangerous craft as submarines, even if he made them, but whatever the cause, no more

notice was taken of Fulton's invention. The same thing happened in England where the inventor returned and staged another successful demonstration. Again he blew an old hulk to atoms, but the government would not adopt his invention. Even when he returned to America, and continued his submarine experiments, no one took them seriously.

Meanwhile, there was always present at the back of Fulton's mind the memory of Fitch's steamboat and the old scow he and his boyhood friends had propelled by means of paddle-wheels. While in France he had become acquainted with Robert R. Livingston, the American Ambassador, and now with the assistance of this friend, who had meanwhile returned to the States, he built a steamboat which he called the *Clermont*. She was a strange vessel according to modern standards. She had a funnel almost as high as the masts, and in a newspaper of that time, in which the first sailing of the *Clermont* was announced, it was gravely stated, as a matter for wonder, that her speed was calculated to be four miles an hour.

As the date of the first sailing drew near there was great excitement. No one expected the new steamboat to be anything but a total failure. Fulton and Livingston were called a couple of fools, and the *Clermont* "Fulton's Folly", and on the day crowds gathered on the shores of the Hudson River to witness the collapse of all the inventor's hopes. The two men responsible for all this excitement, however, were not depressed by the popular derision. They had faith, and at the appointed time Fulton gave the signal, the paddle-wheels

began to revolve, and to the accompaniment of cheers and cries of astonishment from the onlookers, the *Clermont*, with forty passengers on board, began to move. Very slowly at first, but with gradually gathering speed she moved up the stream. Some of the people tried to keep pace with her, but they quickly tired, for the *Clermont* did not stop or break down as everyone had expected. Soon she was out of sight of New York, and was steaming between the green banks of the river. Here and there crowds of people collected and stood gaping at the unusual sight, and so the strange new craft steamed on, without oars or sails to aid her, until she reached Albany one hundred and fifty miles away. She had completed the voyage in thirty-two hours. Robert Fulton's dream had come true, and the derision of those who had called him a fool had come back upon their own heads. The first voyage of the *Clermont* had been a success, and within a short time there was a regular steamboat service on the Hudson.

Years later, in 1813, when the States were again at war with Great Britain, Robert Fulton designed the first steam-driven warship. This second war between the two countries was a stupid war without any real cause. Britain at the time was at war with France, and having command of the seas, she was doing her best to starve the enemy by blockading French harbours. This meant that many American ships were seized or prevented from delivering their cargoes at French ports, and as the years went on, American trade began to suffer considerably. Americans at that time, as in later years, were not quick to see beyond their own shores.



TO THE ASTONISHMENT OF THE ONLOOKERS THE
CLERMONT BEGAN TO MOVE

They would not understand that in fighting Napoleon Britain was fighting a tyrant who was endeavouring to enslave Europe, and was therefore the foe of all freedom-loving men. They resented the interference with their ships and the loss of their trade. Once already they had had to fight Britain for their freedom, and on that occasion France had come to their aid, and so now, without troubling to decide on which side justice lay, they came to hate Britain, while they looked upon France as a friend. At the same time there were many Americans who coveted Canada, and saw their opportunity, while Britain was fighting France, of invading that country, driving the British out, and adding it to their own broad territories.

So it came about that, on June 18, 1812, war was again declared between Great Britain and the United States. It was a war which brought suffering to both countries and gain to neither. The attack on Canada was a miserable failure, and of the two nations the States suffered more, for, having the stronger fleet, Great Britain set up a blockade all along the American coast, and soon reduced American trade to vanishing point.

Now we return to Robert Fulton and the first steam-driven warship. By building this ship, which was called *Fulton the First*, the American government hoped to have a vessel which would play havoc among the sailing vessels of the British fleet, and so break the stranglehold of the blockade. The ship herself was launched in 1814, and had two hulls with a single great paddle-wheel placed between them which gave her a

speed of nearly six miles an hour. Her armament consisted of twenty-six 32-pounder guns, and she was provided with special arrangements for heating the cannonballs till they were red-hot. To the people of that time Fulton's warship must indeed have appeared a more deadly weapon of destruction than the mightiest battleship appears to modern eyes, but before she was ready for action, the war came to an end on December 24, 1814. As a matter of fact, *Fulton the First* never fired a shot in anger, and she met her end in 1829 when an accidental explosion sent her to the bottom.

Robert Fulton passed away on February 24, 1815, and was buried in New York beneath the tower of Trinity Church. Among his many inventions were machines for spinning flax, and making ropes, and various other things, but his chief gift to his countrymen and the world was the steamboat. Within a few years steamboats were plying on many of the great rivers of America, and in 1819 the *Savannah* was the first steamship to cross the Atlantic. The days of sail were coming to an end, the new era of steam was dawning, and the man chiefly responsible for this vast change was Robert Fulton.

ANDREW JACKSON

1767-1845

Many of America's leading men have been born in humble homes. To a boy with grit and the will to succeed, poverty can be a great incentive to effort, and Andrew Jackson, the hero of this story, possessed both these qualities in a marked degree.

Andrew's parents were very poor. Their original home was in Carrickfergus, Ireland, but in 1765 they and their elder sons, Hugh and Robert, emigrated to America where they settled in North Carolina. They were not to enjoy their new life together very long, however. Early in 1767 Mr. Jackson died, a few days before his third son, Andrew, was born on the 15th of March. Thus, even before he arrived in the world, life began to deal out hard blows at young Andrew, for he came into the world fatherless.

Andrew's boyhood could not have been a very joyous one. His sole companions were rough boys of his own class, and the only schooling he received was at a small log hut in the forest where he learned to read and write and work out simple sums. When he was eight the War of Independence broke out, and his two elder brothers joined the patriot army, and were both killed fighting the British. So Andrew and his mother were left alone in the world.

At this time Andrew, we are told, was a tall, slim boy with a freckled face. His clothes were rough and patched,

and he wore no boots or stockings, but went about barefooted. Already, at this early age, his character was beginning to show itself. He had a quick temper and a strong will, and though he was physically weaker than many of his companions, he gave way to none of them. Andrew had courage, and he was also intensely loyal to his friends.

During the early years of the War of Independence fighting was practically confined to the Northern States, and the people living in the South were scarcely affected by the conflict. Indeed, Andrew and his mother probably heard little more than rumours of what was happening. But when late in 1778 the war spread to the South, life suddenly became full of danger for them and for thousands of other poor settlers. For the people of the Southern States were divided in their loyalties. Some remained faithful to the old traditions and wanted the British to win, others were eager for complete separation from England, and bands of armed men belonging to both sides began to roam the country in search of enemies to their cause. Thus everyone lived in a state of perpetual danger, for at any moment of the day or night one of these bands might ride up to a settler's hut and gruffly ask him if he was a loyalist or a patriot. Then if he gave the wrong answer the unfortunate settler would most likely be shot or hanged, and that would be the end of him.

The most hated leader of these raiding bands on the British side was a Colonel Banastre Tarleton. He was a cruel man and showed little mercy to any patriots who fell into his hands. On one occasion he almost captured

Governor Jefferson, who was to become President of the United States, and at another time he made a savage raid on the patriots near Andrew's home, killing and injuring so many that a little log church had to be turned into a hospital for the wounded.

Andrew Jackson never forgot these events of his boyhood. There were no proper beds, no trained nurses, but his mother and the wives and daughters of the settlers bound up the shattered bodies of the injured and did everything possible to ease their sufferings, while Andrew and other boys fetched water and did all they could to help. It was a terrible time, and the sights and sounds he saw and heard bred in young Jackson a fierce dislike of the British, and were no doubt the chief reasons why he went and joined the patriot army. He felt he must do something to help free his country from such men as Tarleton, and though he was only thirteen years old, he was soon fighting staunchly by the side of men twice and three times his age.

Andrew's first taste of soldiering did not last long, however. In 1781 he was taken prisoner, and seeing that he was only a boy, and expecting obedient service from one so young, one of the British officers decided that Andrew would make a useful servant. So he had the boy brought into his presence and, as a beginning, ordered him to clean a pair of boots. Andrew, however, had no intention of working for his captors, and instead of obeying, he drew himself erect, shook his head, and calmly replied that he was a prisoner of war and not a servant. Here was impudence! At first the officer could hardly believe his ears; then, realising that Andrew

meant what he said, he lost his temper and drawing his sword he struck at the boy, inflicting a wound on his face, the scar of which remained with Andrew for the rest of his life.

Certainly Andrew's boyhood was not being a happy one. At the age of thirteen he had witnessed the horrors of war, he had fought as a soldier, and now he was a prisoner and wounded. But he was not a servant and no one could make him one, so he was sent off with other captives to a jail in Camden, South Carolina.

Jails in those days were not pleasant places. For one thing they were not clean, and very soon several of the prisoners were ill with smallpox, from which many of them died. Andrew caught the horrible disease, but he did not die; indeed, while still ill, he was released from prison and set out to walk forty miles to his home. What a journey that must have been! What will-power must have been needed to force his weak limbs to carry him forward! It is a wonder he ever reached home alive, but he did, and there his mother nursed him back to health.

Andrew was well again, but hardly had he recovered when a fresh misfortune fell upon him, this time the worst misfortune which can happen to any boy. His mother had never ceased her efforts to help the American prisoners in British hands and to care for the wounded, and now, weakened with overwork and exposure, she was taken ill and died. Andrew had lost his all. Mother, father, brothers were all dead, and at the age of fourteen he was quite alone in the world.

Now Andrew showed the grit which was in him. He was a boy alone, but he did not allow his loneliness or

his sorrow to wreck his life. He went to Salisbury in North Carolina and took up the study of law, and so hard did he work that in 1787, at the age of twenty, he was admitted to the bar.

Andrew Jackson was now a man, and almost at once he began to climb the steep ladder which leads to fame. In 1788 he moved to Nashville, Tennessee, where he had been given the appointment of public prosecutor. Nashville had only been in existence eight years. It was right on the borders of western civilisation, hundreds of miles from any large town, and its pioneer population contained a number of rough characters with little respect for the law but with a great deal of faith in the power of might and the strong arm. Nashville was certainly a tough spot for a young attorney just twenty-one, but Jackson soon proved that he could hold his own, and won the respect of the roughest of his fellow-townsmen. They recognised in him a character as strong as their own, and within the next ten years he became a member of Congress, a United States Senator, a judge of the Supreme Court of Tennessee, and commander of the Tennessee militia.

Meanwhile, in 1791, he had married a Mrs. Rachel Robards, with whom he lived a very happy married life. Indeed, in his home and in his relations with women, Jackson, so rough and quick-tempered at other times, was the most lovable and chivalrous of men. Jackson was now a judge, but you must not picture him as a dignified gentleman in full white wig and flowing gown. Frontier judges of those days did not cut such impressive figures. We are told that at the age of thirty he was a

tall, long-legged frontiersman, uncouth both in appearance and manner, strong-willed, and outside his home, violent-tempered and impatient of restraint. Once his mind was made up nothing would change it, for he always thought that he knew better than anyone else, while his enmity was easily aroused, and led him into several duels and pistol fights. Yet with all these faults he was truly honest, and his devotion to his country was a ruling passion which made him place her service before all things.

Andrew Jackson was a judge and commander of the Tennessee militia, but as yet he was little known outside that State, and it was not until the war with Britain in 1812 that he became famous. As in all previous wars, the Indians took advantage of the quarrels between their white conquerors to rise in rebellion, and on this occasion it was the Creek Indians of Alabama who were incited by a chief named Tecumseh to revolt against the Americans. Hostilities, as too often happened in the case of the Red Men, began with a frightful massacre. In August, 1813, the settlers in Creek territory realised that trouble was brewing, and leaving their homes, they took refuge at a place called Fort Mims. Actually it was not a proper fort, but a stout stockade used for enclosing cattle, which took its name from the farmer to which it belonged. Thither, for want of a safer place, flocked five hundred men, women and children, bringing with them in carts and upon their backs the few worldly possessions they hoped to save.

It must have been an anxious gathering. To many of them no doubt an Indian war was something new;

yet behind the stockade and protected by the muskets of their menfolk, the women and children may have felt secure. Alas! they knew nothing of the great force which was mustering against them.

The attack when at last it did come was led by a half-breed chief named Wetherford, followed by a thousand painted, befeathered warriors who deafened the appalled defenders with their fearful war-cries. Nevertheless, the white people put up a desperate fight. Everyone who could handle a rifle, or load, or otherwise help, was pressed into service, but though they fought with reckless bravery and inflicted great losses on the enemy, the defenders were too few, the stockade too weak to withstand the onslaught. In a few hours all was over. Of the white folk four hundred had been killed, others were taken prisoners, and some few escaped to spread the dreadful tidings abroad. Four hundred killed! Wherever the news travelled it caused horror and consternation, and faced with the need for swift action, the legislature of Tennessee raised a force of 3500 men and placed them under the command of Andrew Jackson, with orders to punish the offenders.

So Andrew Jackson again went to war, and soon proved his worth as a commander. He marched right through the Creek territory, and meeting the warriors of the tribe at the battles of Talladega and the Horse-Shoe, defeated them with such heavy loss that all resistance was broken and the survivors and their families fled into the forests for safety. But Chief Wetherford was still alive, and knowing that while he lived there was always the danger that he might rally his warriors and

continue the war, Jackson offered a reward for his capture alive or dead. Imagine the surprise of the Americans therefore when one day an Indian chief rode into the camp and, drawing rein before the general's tent, announced that his name was Wetherford.

"Why are you here?" asked Jackson sternly. "Do you not know that you are a rebel and I can have you shot?"

"That is true," replied the chief, "but I am a warrior and do not fear death, and I say that had I the men to follow me, I would still fight you. But the bodies of many of my braves lie at Talladega and the Horse-Shoe, and those that still live are deaf to my voice. So I have come to ask you to help my people. For myself I ask nothing, kill me if you will, but the women and children of the Creek nation never harmed you, and they are hungry and will starve to death in the forest unless you send them food."

The chief ceased speaking, and the story goes that Jackson was so impressed by his fearless bearing that he not only sent food to the fugitives, but set Wetherford free on his promising to keep the peace in the future. It was a promise Wetherford faithfully kept.

Jackson's handling of the Creek campaign had been so successful that he attracted the attention of the government at Washington, and was made a major-general with command over the troops in the southern part of the United States. He was popular with his men. On one occasion, when numbers of his soldiers were sick, he gave up his three horses to help carry them, and tramped along on foot like the meanest

trooper. Seeing this, one man remarked to another, "The general is tough." "He is," replied his companion, "as tough as old hickory." This answer was heard by others and repeated, with the result that thenceforward Jackson became known as "Old Hickory", a nickname which stuck to him for the rest of his life.

The event which was to make Jackson famous, however, and which for the first time brought him before the notice of the whole nation, happened late in 1814. The war between Britain and the United States which had begun in 1812 was still dragging on without any particular advantage to either side, and in the autumn of 1814, the British decided on a bold stroke which they hoped would have a decisive effect upon the conflict. This was nothing less than the capture of the great province of Louisiana which Jefferson had bought from France in 1803. Accordingly, as a preliminary step towards the enterprise, a large fleet of fifty warships under Admiral Cochrane, with sixteen thousand soldiers on board, was despatched to capture the city of New Orleans at the mouth of the Mississippi.

This powerful army was commanded by General Sir Edward Pakenham, a brother-in-law of the Duke of Wellington, and New Orleans would certainly have fallen had not Jackson received warning of the impending peril and ridden post-haste through miles of wilderness to the city, where he arrived on December 2. His presence was badly needed. No preparations had been made for defence, and he found the people in a state of excitement bordering on panic, but Jackson soon altered

all this. He placed the city under martial law, sent messengers in all directions calling troops to its protection, and altogether did everything possible to place New Orleans in a state to defend itself. Old Hickory was not going to let the British have Louisiana if he could help it.

The invaders were sighted on December 10. On that day the British fleet entered Lake Borgne, fifteen miles from the city, and having destroyed six American gunboats, landed troops which presently began to move towards New Orleans. The approach was very slow, however, and it was December 23 before the advance-guard reached a point six miles from the port and found themselves confronted by the army of the defenders.

That evening a fierce battle began which lasted all through the night and ended without victory to either side. Thereafter followed another lull, broken only by a severe artillery duel between the two armies on January 1, and it was not until seven days later that the battle which was to decide the fate of New Orleans was fought. Meanwhile, Jackson and his men had not been idle. Working day and night, they had constructed a great earth embankment in front of their position. Its left flank rested on a cypress swamp, its right on the Mississippi, and against this strong fortification the British regiments advanced to the assault early on the morning of January 8.

It was a cold, dark morning. Mist hung heavily over the battlefield, and at first hid the combatants from each other, but presently the Americans, crouching behind the embankment, descried the long red lines of

the British infantry advancing steadily out of the fog, and instantly the guns mounted on the earthwork opened fire. The effect was devastating! Long lanes of destruction were ploughed through the scarlet ranks, but undeterred by their losses, the British continued to advance with magnificent bravery until they came within musket-shot of the enemy. Then from the earthwork a storm of bullets struck the advancing soldiers. For several hundreds of yards in front of the attackers the top of the embankment literally spouted flame, and in face of this dreadful fire the British assault melted away. In vain some of the British still strove to go forward. In vain General Pakenham rode to the front to rally his men. Before long he was shot three times and killed, and with his fall the assault came to an end, and the survivors of the attacking column fell back out of range.

Meanwhile, a second assault upon Jackson's right flank had also been driven off, and within two hours of the first shot, the battle was over, the British having lost over two thousand killed and wounded in their attack upon the earthwork. Thus ended the attempt to capture New Orleans and conquer Louisiana. After the battle the British army retired towards their ships, and on January 27 the troops re-embarked and the fleet sailed away, leaving Andrew Jackson undisputed master of the field.

The Battle of New Orleans brought the war of 1812 to an end, and since that time the soldiers of Great Britain and the United States have never faced each other in hostile array. The pity is that the encounter and all the loss of life incurred was unnecessary, for on



FROM THE EARTHWORK A STORM OF BULLETS STRUCK
THE ADVANCING SOLDIERS

December 24, even while the two sides were recovering from the shock of the first night battle, far away across the ocean, at Ghent in Belgium, a treaty of peace was being signed by the representatives of the two warring nations. No one in America knew about it, however, for there were no trans-Atlantic cables in those days, and so the fighting went on, and it was not until February 14, 1815, that news of the treaty reached Washington, and the order to cease hostilities was given.

Jackson had proved his skill as a general, and when in 1818 the Seminole Indians in Florida, urged on by some brutish Spaniards and escaped Negro slaves, despatched their war-parties to attack the American settlements in Alabama and Georgia, it was Jackson who was given command of fifteen hundred men and sent to punish them. The situation was a rather difficult one, however. Florida at that time was a Spanish possession, and the government in Washington was anxious to avoid offending the Spaniards. Accordingly, Jackson was ordered to confine himself to defensive operations, and on no account to cross the border into Spanish territory. We can imagine the contempt with which Old Hickory received these instructions. Punish the Indians indeed! How could he punish them if he was not allowed to attack them in their own homes? He had no patience with such half-hearted measures, so with his usual supreme confidence in his own opinion, he completely disregarded the orders he had received, and without worrying about the Spaniards or their feelings, led his troops straight across the frontier into Florida. There, in a quick campaign, he defeated the

Indians and captured the Spanish forts of Pensacola, Gadsden and St. Mark's, after which he returned in triumph to Tennessee in May, 1818.

Again Jackson had been successful, but in other circumstances his lawless methods might well have provoked war with Spain. As a matter of fact, however, that country was in no condition to enter upon a conflict, and the final result of Jackson's campaign was that Spain ceded Florida to the United States in exchange for five million dollars (£1,000,000).

Naturally, a man like Jackson made enemies. This was especially so in some government circles, where his domineering, high-handed ways earned severe disapproval, but among the common people he was immensely popular. They saw in him a hero who put his country's honour and welfare above all other considerations, and who was successful in all he did. They liked and understood his bluff, uncompromising character. When Jackson said a thing they knew he meant just what he said without any reservations such as so often coloured the words of trained politicians, and that if he made a promise he would carry it out to the best of his ability. Most important of all, he was one of their own kind. He was a "man of the people" who had climbed the ladder of fame from the lowest rung, and whom they instinctively trusted, a man, in fact, whom they would like to be their ruler.

So thought a great many Americans, and nowhere more than in his own State of Tennessee, and thus it happened that when the presidential election came due in 1824 Andrew Jackson was one of those put forward

to fill the highest place in the land. But he had still to wait four years before that great honour was his. On this occasion John Quincy Adams was elected, and it was not until 1828 that General Andrew Jackson was chosen by an overwhelming majority to be President of the United States.

At this time Jackson had already passed his sixtieth birthday. His figure was tall and thin, very erect as befitted an old soldier, while his head was crowned with iron-grey hair, and the whole expression of his face betokened energy and determination. His election was hailed with joy by the general public, if not by the wealthier classes. Previous Presidents had always been men of good family, but now, for the first time, a son of the people was ruler of the country, and the masses of the common folk acclaimed him from one end of the land to the other.

Jackson was President for two terms, from 1829 to 1833, and again on re-election from 1833 to 1837. During his period of office many social reforms took place. The standard of education was raised, temperance encouraged, and conditions in prisons and asylums improved. The greatest political struggle, in which Jackson's chief opponent was the famous Henry Clay, was over his dissolution of the United States Bank, and the transfer of government money to other banks. This was done because Jackson and his followers believed the bank to be corrupt and that it used public money to help, by means of loans, those people whose political aims it approved, while it withheld similar assistance from those of contrary views. Whether they

were right or not is a matter of opinion, but certainly the dissolution of the bank did create a large amount of distress, though Jackson's supporters declared that this was artificially caused by the President's enemies in order to undermine his popularity. On the whole, however, Jackson's financial measures were popular with the mass of the people. Taxes were kept low, little was spent on new national undertakings, and money was collected from various European nations on old claims for losses caused to the United States by the wars in the earlier years of the century.

His presidency was further marked by two Indian wars, the Black Hawk War of 1832, and the second Seminole War of 1835, and by a threatened attempt on the part of the small State of South Carolina to break away from the Union. This was due to discontent with the tariff laws by means of which taxes were levied on goods imported from abroad, and had South Carolina persisted in her course the Civil War between North and South, which was waged primarily to preserve the Union, might have come several years earlier than it did.

But Jackson was as resolved then as Lincoln was later to preserve the unity of the country at all costs. In a proclamation he gravely warned the people of South Carolina against the folly of defying the government, and this, together with the despatch of warships to Charleston and some minor concessions to South Carolina's demands, smoothed over the difficulties, and the crisis passed without bloodshed.

Many inventions which were to have far-reaching

effect on the life of the country also saw the light during Jackson's presidency. In 1830 the first steam locomotive to run in the United States was tried out on the Baltimore and Ohio Railroad, the cradle from which the vast network of railways which now covers the country has sprung. In 1834 harvesting was made easier by the patenting of the McCormick reaper, and five years later the first screw propeller was applied to an ocean steamer in place of the paddle-wheels which Fulton had invented.

The Jacksonian era, as it was called, was indeed a period of progress, and through it all the old soldier pursued his masterful way. He regarded the members of his cabinet more as inferior military officers than as responsible ministers of state. Opposition made him furious, and he treated it as a thing to be trampled underfoot. He still believed that he knew better than any other man what was best for the country, and once he had made up his mind on a matter nothing could change him. On the whole, perhaps, he was more right than wrong, for it is certain that at the end of his eight years as President he was more popular with the country at large than when he had first assumed that high office.

Jackson was now in his seventy-first year, and at last "Old Hickory", that grand old warrior of so many battles, consented to retire from active life, and went to live at his home "The Hermitage" near Nashville, Tennessee. There he spent his last years quietly and uneventfully, and finally passed away on June 8, 1845.

SAMUEL FINLEY BREESE MORSE

1791-1872

CYRUS WEST FIELD

1819-1892

You remember the story of Franklin and his kite, and how, to quote a portion of his epitaph, he "wrenched the lightning from Heaven". By so doing he had proved that a flash of lightning and electricity were the same thing. But beyond that he did not go far. He did not discover how to harness Nature's greatest force to the service of man, and it was left to others to follow up his researches and turn them to practical use. Two of these men were Americans, and what they did is told in this story.

Morse was the cleverer and more famous of the two. His father, Jedidiah Morse, was a Congregational minister in Charlestown, Massachusetts, and there Finley was born on April 27, 1791. Finley's father was a scholarly man. Besides being a minister he was a writer on geography, and when his son was fourteen he sent him to Yale College to complete his education. There he came under the instruction of two masters named Jeremiah Day and Benjamin Silliman, and from them he learned what little there was to know about electricity at that time. Finley was interested in all they taught him, dimly perhaps he already envisaged some of the uses to which that mighty force might be

turned, but at that time the knowledge he gained was stored away at the back of his mind, and lay there like a seed in the ground which awaits the right conditions of sunshine and rain to awaken it to life.

For there was a greater interest in young Morse's life than science. This was art. He first studied under Washington Allston, an American artist, and in 1811 he accompanied Allston to England, where another celebrated American painter, Benjamin West, then President of the Royal Academy, gave him every assistance and encouragement. The youth's work soon attracted notice. In 1813 he was awarded a gold medal for a painting entitled "The Dying Hercules", and when he returned to America two years later he was already regarded as a coming man.

Now followed seventeen years of almost unbroken success for the young painter. His pictures were popular, they sold well, and fame and fortune were within his grasp; indeed, it looked as though the name of Samuel Finley Breese Morse was going to be added to the list of great artists. In 1825 he helped to found the National Academy of Design and became its first President, and in 1829 he crossed the sea again with the purpose of improving his art by a study of the Old Masters in Europe.

But even then, though he did not know it, Morse's days as a painter were numbered. In 1827 he had met a Mr. J. F. Dana of Columbia College, and the talk turning on science and electricity, Morse heard from him the simple facts about an electro-magnet and electro-magnetism. At the time he may not have given

the matter very deep thought; nevertheless, he stored all that he had learned away in his mind with the other electrical knowledge he had acquired in his college days. There, just as a drop of water moistening a seed may awake in it the first stirrings of growth, this new knowledge awakened old memories and interests, and all unknown to Morse, began the change which before long was to alter the whole course of his life.

But at the moment art still held sway. Morse visited Europe, studied the Old Masters, and for a time was one of a small colony of other American artists in France. Then one day a conversation occurred which was still further to stir the slumbering seed of inventive genius lying asleep in Morse's brain. A party of artist friends were gathered together when the conversation turned to methods of communication, to the semaphore, to the firing of cannon to convey a special piece of news, and above all to the letter post. This last seemed woefully slow to the painters, separated by the whole Atlantic from their native land, and one of them expressed a wish that there was some quicker way of hearing from home, of conveying messages across a great distance. And then, suddenly breaking into the conversation, Morse said, "What about electricity? That travels faster than sound, faster than anything."

What about electricity? What, indeed? The thought stuck in Morse's mind, and when in 1832 he returned to America on the packet-ship *Sully* he discussed with his companions on board the idea of sending messages over a distance by means of electricity. These were so flatteringly interested in his suggestion, that then and

there he drew a plan of the apparatus by which such messages might be transmitted, and showed it to the captain of the ship and his fellow-passengers.

That little seed which had been lying dormant in Morse's brain ever since his college days was now awake and growing fast, and by the time he reached home, it had developed into such a sturdy plant that his love for art and painting was forgotten. In its place Morse was filled with a consuming ambition to perfect the piece of apparatus he had devised, so that messages might be sent by electricity from one place to another with the speed of light. Thereupon one of the most extraordinary changes ever witnessed took place in the life of a genius. Morse was already a well-known painter, and he was on the way to becoming a celebrated artist. Fame, affluence, a pleasant life free from care lay before him, and now, at the age of forty-one, he in one moment flung it all aside, put away his paints and brushes, turned his studio into a workshop, and set off along the hard and thorny path of invention.

A hard and very thorny path it soon proved to be. Morse had no one to help him. He made his own moulds, models and castings; yet, though he worked with desperate energy, nothing went right. It was all so clear in his mind, this thing which he wanted to do, but for a long time he could not turn his theories into facts. Not that he ever lost heart, or thought of giving up, and becoming an artist again. In middle life Morse had found the thing he wanted to do and nothing would turn him from it. He worked longer and longer hours. He denied himself proper food and clothing so



MORSE DISCUSSED THE PLANS FOR HIS INVENTION
WITH HIS COMPANIONS ON BOARD

that of the little money he possessed he might have more to spend on his experiments. The once well-dressed, popular artist had become a down-at-the-heel, ragged inventor whom most people regarded as having sacrificed a great career to follow a crazy dream quite impossible of realisation.

Nevertheless, Morse persisted, and at last, after five years of unceasing toil, success came to him, and he completed a small apparatus which was actually the first electric telegraph in the New World, and the source from which has sprung the vast telegraph system which now covers the American Continent. Morse had triumphed, but he had yet to convince his countrymen of the worth of his invention. With this end in view, he set up a small circuit of 1700 feet of copper wire in the building of New York University, of which he was still a professor, and there, on September 2, 1837, he transmitted a message along his little line and successfully demonstrated his invention before a group of astonished friends.

The United States now had an electric telegraph, but to invent a thing is one matter, to persuade people and especially a government to adopt it for general use is quite another. So Morse was soon to discover; meanwhile, he had one stroke of good fortune. A firm of iron and brass workers named Vail were so impressed by Morse's invention that they offered to join him in pushing his telegraph, and the offer being gratefully accepted, they lent him some help both financially and in the production of his apparatus. With their assistance the original machine was improved and a patent se-

cured, but when Morse approached Congress with a petition asking them to adopt his telegraph and give him money to build a real telegraph line and experiment on a large scale he was met with derision. Send messages over a wire! Impossible! Morse might be able to do it in a comparatively small place like New York University, but to imagine that the same thing could be done over a great distance was ridiculous. And, anyway, who wanted an electric telegraph? Hadn't they got the semaphore, and what more did they need than that? So the majority of representatives in Congress argued, with the result that Morse got no money and was again thrown back on his own scanty resources.

But though the United States government refused him assistance, Morse was convinced that a great future lay before his invention. He was determined, moreover, to protect his telegraph against people who might try to steal his ideas, so he now sailed for Europe with the intention of taking out patents in different countries. But again disappointment awaited him. In England he discovered that two inventors named Wheatstone and Cooke were at work on a device similar to his own, and his application for a patent was refused. Russia proved indifferent, and only in France did he secure patent rights for his telegraph. This protection, however, availed him little, for when the French government discovered the real value of his invention it calmly stole it for its own use, and completely disregarded all Morse's appeals for compensation.

Morse's trip to Europe was therefore anything but a success, and at the end of a year he returned to New

York a sadder and certainly a much poorer man. One thing only did he bring back with him which was of any value. In France he saw an electro-magnet which was a considerable advance on the one he had been using, and on his return he incorporated it into his machine and thus greatly increased its efficiency.

Morse was now worse off than before he went to Europe. He had hardly enough money to live on, and if anything was to come of his invention, he required money above all things. So he continued to worry Congress. Again and again in his petitions he stressed the immense value of an invention by which messages could be sent from place to place instantaneously, and at last it began to appear that his persistence was having some effect. But still he was granted no help. March, 1843, came, and on March 3 the session was due to end. Morse lived in a fever of anxiety. Would his petition be granted? The last day of the session arrived, and Morse spent most of it in the Senate Chamber, staying there hour after hour, and hoping as each fresh matter came up for discussion that it would be his petition, and that at last he would be granted the money which would mean the realisation of all his dreams. But nothing was done. The day dragged on, other matters were dealt with but not his, and at last, at ten o'clock at night, he gave up hope and returned home. Failure stared him in the face. Without help he could not go on. Imagine his surprise and joy therefore when almost the first thing he heard the next morning was that the last act of Congress, performed just before midnight, had been to vote him the money he needed to carry on his work.

Morse's years of toil and hardship had at length received their reward.

With money to spend Morse was now able to go straight ahead. An experimental telegraph line, some thirty-five miles in length, was built between Washington and Baltimore, and on May 24, 1844, Morse sent the first message along the wire. The words of the message, chosen by a friend of his and taken from the Bible, were "What hath God wrought!"

Thus Morse crowned the hard work of years and built his telegraph line. The new line was an instant success, but it was not long before it aroused the cupidity of unscrupulous people, and in 1847 Morse was forced to defend his right to the patent of his invention. And now those conversations held so long ago on board the packet-ship *Sully* were to prove their worth. Remembering them, Morse called the captain of the *Sully* to his aid, and he declared on oath in court that the telegraph apparatus Morse had patented was identical with that depicted on the rough plan which the inventor had shown to him and several passengers during the voyage across the Atlantic. So Morse won his case.

Besides being one of the inventors of the electric telegraph—other men were at work on the same idea in England—Morse is perhaps even better known for the code which bears his name, and in which he invented an alphabet which is still used by the whole civilised world. This code alphabet consists of a system of dots and dashes, different combinations of which represent different letters. Most of us know, for example, that . . . — means V. Modern machines are

slightly more complicated than the one Morse made, but the underlying principle is the same as when the inventor sent out his first message, the dots and dashes of which he despatched along the wire by alternately switching on and cutting off the electric current. This he did by means of a handle, and as he moved the handle an electro-magnet at the receiving station was alternately magnetised and demagnetised, and caused a needle to jerk to and fro in movements corresponding to the dots and dashes Morse was sending out.

Thus by Morse's invention anybody of any nation, provided he was able to read the Morse code, could take down a message in any language, no matter whether he knew it or not. Nor is the Morse alphabet confined to the telegraph. The universal dots and dashes can be flashed out by lamps, blown upon the blasts of a siren, tapped out by a finger gently drumming upon a table, or even sent by the flickering of an eyelid. So when next you hear the familiar tapping sounds upon your wireless remember the American painter who became a great inventor. Morse is speaking to you.

Morse lived to within three weeks of his eighty-first birthday, and it is pleasant to think that the last years of his life were passed in comfort and the sunshine of success. In 1858 a gift of 400,000 francs was made to him by seven European countries in recognition of his work, and in his own land his memory is perpetuated for all time by a fine statue erected in Central Park, New York. There he stands to this day.

From Samuel Morse to Cyrus West Field, the man who was largely responsible for one of the greatest

developments in the use of the electric telegraph, is a natural step. Field was born at Stockbridge, Massachusetts, on November 30, 1819. In later life he became a capitalist interested in various branches of business. He was more than a mere business man, however. He had vision, and the electric telegraph particularly appealed to his imagination. He saw what Morse had done, he saw the telegraph wires spreading across the country joining town to town, and he argued with himself that if city could be connected with city, then it should be possible to join country to country by means of telegraph wires laid across the bed of the ocean.

It was not an entirely new project. In 1850 an electric cable had been laid from Dover to Calais, but a cable across the Atlantic, from the British Isles to the United States, was an infinitely greater undertaking full of unknown problems. But Field was not a man to be deterred by difficulties, however great they might appear. They only made him the more determined to succeed, and in due course he formed the New York, Newfoundland and London Telegraph Company. He then crossed the Atlantic to England to discuss the great project with Sir Charles Bright, an English telegraph engineer.

Bright was just as enthusiastic for the undertaking as Field, and an English company was formed in 1856. This was called the Atlantic Telegraph Company, and after a survey had been made of the ocean bed, an attempt to lay the cable was begun in August, 1857. The cable was to be laid from Valentia on the coast of Ireland to Trinity Bay in Newfoundland. The distance

was about 1900 miles, but it was calculated that the irregularities in the ocean bed would take up another 1100 miles of cable, making 3000 miles in all.

This first attempt, however, was doomed to failure. Twice the cable broke while it was being paid out, the second time in deep water, from which it could not be recovered and mended, and the cable ships returned to port.

In June the following year a second attempt was made, but this time a violent storm brought about the failure of the operations. Nevertheless, Field and his companions refused to be discouraged, and a few weeks later, between July 7 and August 5, they made their third attempt to connect the New World and the Old by telegraph. This time their efforts met with a measure of success. The cable was successfully laid and Queen Victoria and President Buchanan of the United States exchanged messages. But either the electric current was too weak, or something was wrong with the insulation of the wires along which the current flowed, for after a few weeks the cable became useless.

Three attempts had ended in failure, and those who had scoffed at Field and his vision now laughed louder than ever, and declared that the mad dreamer would at last give up his vain project. But not Field. He believed in his dream. One cable had almost succeeded, and he was determined to go on. Seven years, during which the Civil War convulsed the country, were to elapse, however, before the next attempt was made, and then, in 1865, the big Atlantic steamship, the *Great Eastern*, was chartered to lay a fourth cable. For a time

all went well. Hundreds of miles of cable were paid out without mishap, and the *Great Eastern* had covered 1064 miles of the voyage when suddenly the cable snapped under the immense strain. Efforts were made to recover the broken end, but all proved futile, and so for the fourth time the attempt to connect the two continents had come to an untimely close.

Now surely Field and his companions might have been forgiven if they had retired from the fray, but Field for one refused to abandon the enterprise. Failure only made him more determined to succeed, and the following year the *Great Eastern* again set out to connect Great Britain with America. This time success attended the attempt. Without a break the cable was laid across the floor of the ocean, and from that day to this Britain and America have been connected by the telegraph, which Morse invented, and in which Field saw the vision of continent linked to continent beneath the trackless miles of sea.

Thus the desire of those artist friends with whom Morse had once discussed the problem of communications was fulfilled, and the New World and the Old were brought so close together that a message which it had once required weeks to deliver could now be sent from one to the other in a few minutes. And Morse and Field, more than any other men, had worked the wonder.

ABRAHAM LINCOLN

1809-1865

Among all the great figures of American history there is none who is regarded by his countrymen to-day with deeper reverence and affection than Abraham Lincoln. Yet this great man was born the poorest of the poor. Like Andrew Jackson he was a son of the people. He had none of the advantages which come from birth and wealth, and his chief possessions were the strength and uprightness of his own character, which enabled him to overcome all difficulties, and ultimately to guide the United States through the period of the greatest danger that country had so far experienced.

Abraham's father was Thomas Lincoln. He was a farmer and carpenter by profession, but in character he was a good-natured ne'er-do-well, without education, unable to read or write, and with no desire to improve himself. Fortunately for himself, however, and for his children he married a woman of much stronger character and intellect. Her name was Nancy Hanks, and they were married on June 12, 1806, and lived for a time in Elizabethtown, Kentucky.

Thriftless Thomas, however, could not stop in one place long. Soon he and his wife were on the move again, this time to Rock Spring Farm, three miles from Hodgenville, Kentucky, and there on February 12, 1809, their son Abraham was born. Poor Nancy Lincoln! One feels rather sorry for her and her little boy.

They would have liked a permanent home, but in 1813 Thomas was off once more, this time to another farm on Knob Creek a short distance away. Three years later the family possessions were again packed into the family wagon, and Thomas led the way across the Ohio River into the wild, uncivilised wilderness of Spencer County, Indiana.

There Thomas Lincoln, helped by young Abe, as Abraham was called for short, built a hut of rough logs, and furnished it with a rude table and stools hacked out of the trunks of trees. For beds they had bags of dried leaves, and Abe's bedroom consisted of a tiny loft in the roof of the cabin, which he reached by means of a primitive ladder consisting of wooden pegs driven into one of the log walls.

Such was the home in which one of America's greatest men passed his boyhood. Abe had no shoes or stockings, his clothes were rags, and there was rarely enough to eat. Often for supper the boy would have nothing more than a crust of bread and a mug of water; nevertheless, in one respect he was as lucky as any boy could possibly be. He had a good, kind mother, and when that mother died in October, 1818, Abraham's grief was very great.

This was young Abe's first real sorrow, and yet in a manner of speaking the boy's luck still held, as the saying goes. For his father, though worthless in many ways, appeared to attract good women, and in December, 1819, he married again. This time his wife was a Mrs. Sarah Johnston, and unlike so many stepmothers, she took the motherless boy straight into her affections, and did her best to replace the parent he had

lost. She improved the home, encouraged Abe in his studies, and so won the boy's respect and love that he would do anything for her. In after years she was wont to say, "He was the best boy I ever saw."

Study, indeed, played a very important part in the life of this boy who was to become a famous man. In the wild frontier region in which the Lincolns lived, schools were very few, and what there were consisted of small log huts with a few simple books, while all the pupils learned was to read, write and do easy sums. In all his life Abe attended five such schools, tramping to and fro along the forest trails on his bare feet, and the time he spent at those five schools added together amounted to about one year.

One year at school! It was not much, but it was long enough for Abe to learn to read and write, and to add, divide and subtract. Once he has gained so much knowledge the whole world lies open to any boy who has the determination to get on and improve himself. And Abe had that determination in a marked degree, so when he was not at school, or helping his father, or doing a job of work for one of the neighbours, he would spend his time working out sums or reading. Abe was a great reader. He had six books, the *Bible*, *Æsop's Fables*, *The Pilgrim's Progress*, *Robinson Crusoe*, a *History of the United States*, and a *Life of Washington*, and these he read over and over again by the light of the log fire, when the day's work was done and the rest of the family were in bed. At other times he would practise his writing, and because there was no money to buy such luxuries as pens and paper, he used a piece

of charcoal taken from the fire for a pencil, while slivers of clean white wood formed his exercise-books.

In this manner young Abraham Lincoln educated himself. As he grew older he tried his hand at composition, pieces of which he would sometimes read aloud to his neighbours, and because they were ignorant, uneducated folk they thought the things he wrote wonderful, and Abe more wonderful still because he was able to write them. So early in life Abe won the esteem of his neighbours, but their liking was based on something deeper than the fact that he was more clever than they. Abe was one of those absolutely honest boys who grow up into fine men. If there was a wrestling match or a game to be umpired it was always Abe who was called upon to be referee, because both sides knew that he would be absolutely impartial. So great was his reputation for fair play that people spoke of him as "Honest Abe", a nickname which he lived up to all his life.

Abe had early shown signs of growing into a fine man in size as well as in character. At the age of nineteen he stood six feet four on his bare feet, and already he was so strong that he could lift weights which other men could not move, while there were few who could hold their own against him in a wrestling match. Yet he never abused his strength. Like most big men he was good-natured and kindly, and was always willing to put himself out to help a friend.

At this time Abe earned his living by doing odd jobs for anyone who had work to offer. One week he might be a farm-hand, the next would find him at work splitting rails, and a week later he might be serving as

carpenter to someone who wanted a hut built. Nothing came amiss to Abe. One year he grew a large crop of potatoes, and having loaded them on a flat-bottomed boat he sailed away down-river, selling them for a respectable profit at the settlements he passed on the way. This voyage led to another, for seeing how successful Abraham had been, a trader named Denton Offutt engaged him to help his son take a boat-load of bacon to New Orleans. This meant a voyage of 1800 miles by water down the Sangamon, Illinois and Mississippi Rivers, and on the way the two young men were attacked by a gang of robbers composed of escaped Negro slaves. The thieves met with a rude shock, however. They had expected an easy capture, but instead they suddenly found themselves assailed by a young giant who wielded a club with such prodigious vigour that within a few minutes the bruised and bleeding rascals were in panic-stricken flight.

After this adventure the voyagers reached New Orleans without further mishap, and there they sold the bacon. In that city, too, Lincoln saw his first slave-market, and the sight filled him with disgust and anger. It was not right, he told himself, that human beings should be treated thus, and especially was it wrong in a country which by the words of its Constitution professed to believe: *That all men are created free and equal; that they are endowed by their Creator with certain unalienable rights; that among these are life, liberty, and the pursuit of happiness.* So Lincoln thought as he witnessed young Negroes of both sexes being sold to the highest bidders like so many cattle, and the scenes he witnessed that

day filled his mind with a revulsion which in years to come was to alter the history of his country.

Soon after Abraham and his companion returned home, the Lincoln family made yet another move. This time they packed all their goods into the ox-wagon and drove for two weeks through the forest to Illinois, where Abraham and his father built a large log cabin and railed off several acres of land on which to grow corn and vegetables. But Abraham was getting tired of doing odd jobs. He wanted a more permanent occupation and more leisure to continue his education, and at the age of twenty-two he secured the post of assistant in Mr. Offutt's store at New Salem. There he soon became popular and won everybody's respect by his fair dealing, and when he was not attending customers he would lie full-length on the counter with his head buried in some grammar or history book which he had borrowed from the village schoolmaster.

In those days it was the aim of all ambitious men to help rule their country. Young Lincoln was no exception and in 1832 he put up as a candidate for the Illinois House of Representatives. But now, before the election could take place, one of the periodical Indian wars broke out. It was led by a chief called Black Hawk, and Lincoln volunteered to go and fight. He was made a captain, but he took part in no battles; indeed, in after life, he was wont to laugh and say that the only enemies he fought were the mosquitoes. So it cannot be said that Lincoln covered himself with glory, and when he returned from the wars he was defeated in the election for the House of Representatives.

Still he was not disheartened. His friends in New Salem rallied round him, and secured for him the appointment of postmaster, and when he heard that a deputy surveyor was needed he set himself to qualify for the task and in due course was given the post.

Lincoln already had his feet on the lower rungs of the ladder which leads to success. The poor ragged boy was a postmaster and surveyor, and as these tasks occupied only a part of his time he now set himself to study law. This he did with such success that in 1836, at the age of twenty-seven, he was admitted to the bar, and the following year he moved to Springfield, afterwards the capital of Illinois, and began to practise as a lawyer. Meanwhile, he had again stood for the Illinois House of Representatives, and being elected in 1834, he served as a member continuously till 1842.

In his work at the bar Abraham's reputation for truth served him in good stead. He was still "Honest Abe" to his many friends, and those who knew him and were in need of his help were always sure of a straight deal. On one occasion a friend of his named Armstrong was arrested on a charge of murder, and everyone except Lincoln felt sure that he would be found guilty at his trial and hanged. Lincoln, however, was not so certain, and took the trouble to make inquiries, with the result that he came to the conclusion that the prisoner was innocent. Thereupon he offered to defend him at his trial, and as the Armstrong family was too poor to pay anything, Lincoln said that he would defend the prisoner for nothing.

The day of the trial arrived, and the chief witness for

the prosecution was sworn and declared that on the night in question he had actually seen the murder committed by the prisoner. When asked how he had been able to see in the dark, he named an hour and said that at the time the moon had been shining brightly.

"You are quite certain of this?" asked Lincoln, cross-examining the witness.

"I am," came back the reply.

"You swear you are telling the truth?" asked Lincoln again.

"I do."

Lincoln nodded as though satisfied and producing an almanac turned to the attentive jury.

"You have heard the witness declare that he saw the murder committed by the light of a bright moon," he said, "but this almanac proves that at the time when the prisoner is supposed to have been seen committing the murder no moon was shining, and therefore the witness cannot possibly be telling the truth."

A simple argument, but it convinced the jury that Lincoln was right, and they at once passed a verdict of "Not guilty", and set the prisoner free.

There are numberless similar tales of Lincoln's kindness and generosity, and no person worthy of aid ever appealed to him in vain. His honesty, indeed, helped to keep him poor, for as a lawyer he would never undertake a case unless he believed it to be just. Then he always advised his clients to settle their cases out of court if possible, and he never charged a man more than he knew he could afford, with the result that his fees were often very small.

Meanwhile, in 1842, he married a Miss Mary Todd, a girl of good Southern family. The marriage was not a very happy one. Mary was refined, Lincoln, for all his great heart, was lacking in social graces, and the two did not get on well together. They had one thing in common, however: they were both ambitious. Mary wanted to see her husband a member of Congress because of the social distinction it would bring and because it would take them to the capital, Washington, and Lincoln desired to reach the same goal because there were so many wrongs his honest soul desired to put right. Accordingly, in 1842, he gave up his seat in the Illinois Legislature and put up for Congress. In this first attempt he was unsuccessful, and it was not until 1846 that he was elected a member of the National House of Representatives.

Honest Abe was now one of those who made laws for the whole nation, but strangely enough, in view of what he was to accomplish in later years, he did not distinguish himself during his two years at Washington. Perhaps he was too honest, too frank for the professional politicians, at any rate, he was not a success as a law-giver, and at the end of his two years of office he retired from politics and returned home to Springfield, where he resumed his occupation as a lawyer.

Abraham Lincoln was now thirty-nine years old, and by his own efforts he had succeeded in rising from being the son of a ne'er-do-well frontiersman to the position of a respected and moderately successful lawyer. But he was not rich, he was not a great man except in so far as honesty and kindness make any man great, and had

anybody prophesied at that time that "Honest Abe" was to become one of the most famous figures in his country's history the prophet would have been laughed to scorn. But circumstances and his own strong beliefs were to force him to the front, and when the time came, it was Lincoln, more than any other man, who was to save the young nation from destruction.

At that time the burning question in the United States was that of slavery. The Northern or free States as they were called, because they had no slaves, believed that slavery was wicked and should be abolished, while the Southern or slave States, where the wealth of the great landowners depended largely on their Negro servants, were deeply resentful of any such suggestion. But the matter did not end there. With the purchase of Louisiana a vast new territory had been added to the country, and as fresh States were formed in this territory, the question arose whether they should be slave States where the ownership of slaves was permitted, or free States where slavery was not allowed.

For years the controversy ran high, and as the time passed without any solution being found, the tempers of both sides became more violent. Lincoln and those who thought as he did were against increasing the evil of slavery by adding new slave States to those already in existence. Not that Lincoln wished to abolish slavery from the whole country by the stroke of a pen. He knew that many of the Southern landowners treated their slaves very kindly, that to rob them altogether of their Negro servants would ruin them, while the lot of the slaves themselves, suddenly turned adrift on an

unsympathetic world, would be an unhappy one. His idea was that slavery might be abolished gradually by declaring all new-born babies free, by stopping the importation of fresh slaves from Africa, and by similar methods. And as he thought, so thought thousands of his countrymen, but though the reasoning was good the supporters of slavery would not listen to it. They did not want slavery to be abolished by any means however reasonable or good.

Nor would the slave States agree that all newly formed States should be free. They feared that if this was done then the representatives of the free States in Congress would so outnumber the representatives of the slave States that they would be able to pass any laws they liked, laws which the upholders of slavery felt sure would be harmful to their interests. This they declared was neither fair nor just, and they insisted that the only way of settling the matter was to create new slave and new free States in equal numbers, so that the representatives of the two sections of the community should balance each other in the nation's parliament.

Such was the state of affairs in the nation during the years following Lincoln's retirement from politics. For six years he lived the quiet life of a respected country lawyer; then in 1856 circumstances again forced him into politics. He became a member of the newly formed Republican Party, and in 1858 he stood for the Senate, his opponent being Stephen Douglas, a member of the Democratic Party. The two men met in a series of public debates at different places in Illinois to argue the question of slavery, and while Lincoln declared that

it was wrong and that it must eventually be abolished if the United States was to continue as a single nation, Douglas had no such convictions. His argument was that the slave States and free States should and could continue to live side by side in peace, and so long as they did that he did not worry himself whether slavery was right or wrong. In the end Douglas won the election, but Lincoln had actually gained more than he had lost. His views on slavery, as set forth in his speeches, spread far beyond the boundaries of his own State. Extracts from his speeches were published in papers all over the country, and as the quarrel between the slave States and the free States became hotter and more violent, those people who believed in equal rights for all men, whether black or white, began to look upon him as their champion, while the supporters of slavery gradually came to regard him as their greatest foe. So from an obscure lawyer Lincoln in a short space of time became a figure of national importance, placed in that position by his own steadfast convictions of what was right and what was wrong.

Events were now moving fast towards the terrific climax which was to crown Lincoln's life. In 1860 a new Presidential election was due, and Abraham Lincoln, still Honest Abe to his intimate friends and townsmen, was put forward as the candidate of the Republican Party and eventually elected. The son of an ignorant carpenter had become President of the United States, and as though his election was a match placed to a powder magazine, the quarrel which had been fermenting between the North and South for so

long blazed up into almost open strife. Disregarding his often repeated assertions that he had no intention of abolishing slavery suddenly, the Southern States professed to see in Lincoln a foe whom they could not possibly accept as their ruler, and set about to declare their independence of the Union even before he took office. South Carolina was the first to go. On December 20, 1860, the State Legislature passed an ordinance declaring its independence, and within six weeks, Georgia, Florida, Alabama, Mississippi, Louisiana and Texas followed South Carolina's example. These States were later joined by Virginia, Tennessee, Arkansas and North Carolina. The United States of America were united no longer.

Such was the threatening state of affairs which confronted Abraham Lincoln when he was sworn into the Presidency on March 4, 1861. For the moment the question of whether slavery was right or wrong had become submerged in the still greater one of whether the nation, which had won its freedom over seventy-seven years before, was to crack into two, and cease to be a single united country. This Lincoln was determined should not happen, even if it meant fighting that most terrible of all wars, a war between men of the same country and the same race. As the month passed the hopes of a peaceful solution wore thinner and thinner. Vainly Lincoln pleaded for moderation and calmness, repeating again his assertion that he had no intention of violently disturbing the rights and institutions of his fellow countrymen in the South, and pointing out that if they continued along the path they had chosen a

terrible war was the only possible result. The Southerners would not listen to him. Already they had set up an opposition government under a rival President named Jefferson Davis, and throughout the Confederate States, as those which had declared their intention of seceding from the Union were called, preparations for war were being hurriedly pushed forward, and all military property, with the exception of one or two forts, had been seized.

One of these forts was Fort Sumter. It stood in Charleston harbour, and had a garrison of eighty-three men under Major Robert Anderson. Major Anderson and his little force were staunchly loyal to Lincoln and the rightful government, and when, early in April, the newly formed Confederate government ordered General Beauregard, who was in Charleston with seven thousand Southern troops under his command, to demand the fort's surrender, Major Anderson indignantly refused. Thereupon the Confederate gunners opened fire upon the fort, and kept up the bombardment for thirty-two hours, before, tortured by wounds and thirst and with the fort blazing furiously, the gallant little garrison was forced to surrender. This happened on the afternoon of Saturday, April 13, 1861. The Civil War between the North and the South had begun.

You will read something about that war in the next chapter; here it is only possible to sketch the part Abraham Lincoln played in that great struggle. He was the tower of strength upon which his side leaned. When the Northern armies were defeated he never lost heart, but set to work to gather new ones. At the start he was

hampered by bad generals, and it was some time before he found the right man in General Grant. But above all Lincoln impressed upon his followers, and later on upon millions of people in the outside world, that they of the North were fighting to preserve something precious, nothing less, indeed, than the continued existence of a great and free nation. Lincoln knew that a powerful United States might play a noble part in the world of the future. He also knew that a broken, disrupted country would not only bring no happiness to its citizens but would become a thing of small account among other nations. To-day, more than ever before, we are able to realise what the world owes to this rugged backwoodsman who became President, and who chose an awful war as being a lesser evil than tamely allowing the Southern States to secede from the Union. For had there been no Abraham Lincoln there might well have been no powerful United States of America to stand forth in the hour of need as a protector of the oppressed and a champion of freedom.

The war was thus a war for the preservation of unity; nevertheless, the slavery question was not forgotten by Lincoln. He knew that sooner or later slavery would have to be abolished, but it was not until January 1, 1863, that he felt strong enough to issue a proclamation declaring that all slaves held by people in rebellion against the proper government of the country should henceforward be free. Thus in a few words he emancipated all the slaves in the rebellious Southern States, and the issues at stake had been plainly set down for all to understand. If the North won the war, a united

nation free from the taint of slavery would emerge from the chaos; if victory went to the South, the result would be disunion, and hundreds of thousands of human beings would continue to live in ignominious bondage.

The year 1863 also saw the war enter upon its decisive phase. On July 1-3 the battle of Gettysburg was fought and ended in the defeat of the Southern forces, and the following day the great fortress of Vicksburg, far away on the bank of the Mississippi, surrendered to a Northern army. These two victories practically decided the issue of the war, though the South still struggled on for nearly two more terrible years. When in November Lincoln visited the field of Gettysburg he spoke feelingly of those who had died there and of the future in these memorable words:

"... In a larger sense, we cannot dedicate—we cannot consecrate—we cannot hallow—this ground. The brave men, living and dead, who struggled here have consecrated it far above our poor power to add or detract. The world will little note nor long remember what we say here, but it can never forget what they did here. It is for us, the living, rather to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced.

"It is rather for us to be here dedicated to the great task remaining before us—that from these honoured dead we take increased devotion to that cause for which they gave the last full measure of devotion; that we here highly resolve that these dead shall not have died in vain; that this nation, under God, shall

have a new birth of freedom; that government of the people, by the people, for the people, shall not perish from the earth."

Lincoln's first term of office as President was approaching a close, but in November, 1864, he was re-elected for a second period. The war was now almost at an end, and in the months that followed, the last resistance was beaten down and victory for the North assured. As peace drew near, Lincoln devoted all his efforts towards reconciling the two contending sides. He felt no enmity against the Southerners. He felt only sorrow for all the wasted years and ruined lives, and his great ambition now was that North and South, the victors and the vanquished, should drop their animosities and work together towards building up a better and a more united nation. At his inauguration as President for a second term on March 4, 1865, he brought his speech to a conclusion with the following words:

"With malice towards none; with charity for all; with firmness in the right, as God gives us to see the right, let us strive on to finish the work we are in; to bind up the nation's wounds, to care for him who shall have borne the battle, and for his widow and his orphan—to do all which may achieve and cherish a just and lasting peace among ourselves, and with all nations."

Noble words spoken by a great man. Alas that Lincoln did not live to translate them into facts! On April 9 the war came to an end with the surrender of the Southern armies, and at a meeting with his ministers



| LINCOLN SPOKE FEELINGLY OF THOSE WHO HAD
DIED THERE

on April 14, Lincoln declared in the spirit of his speech that now the war was over there must be no vindictiveness, and that those who had lately been enemies must work together as friends to heal the scars of war. On the evening of that day Lincoln sought temporary relaxation from his worries by visiting Ford's Theatre in Washington. There he was sitting in a box watching the play when suddenly a demented actor named Booth, said to have belonged to a group of Southern conspirators, thrust his way in through the door and shot the President in the head. Lincoln did not die at once. He was carried from the theatre to a private house where he lingered for some hours, finally passing away a few minutes after seven o'clock the following morning. With him went the defeated South's last hope. The man whom the Southerners had once looked upon as their greatest enemy had, in the hour of their disaster, become their greatest friend, and when he died the spirit of reconciliation which he had preached, died with him, and there was no one to take his place. Thus there now fell upon the unfortunate Southern States a period of vindictive retaliation on the part of the victors exactly contrary to Lincoln's intentions. Yet though he had not lived to build up the peace as he had hoped, Honest Abe had won on the greater issue. He had preserved the unity of the American nation, and by so doing had saved for the world a whole continent where a great democracy might rise, and men might live free from the rage and tyranny of tyrants. That is what Lincoln did, and what nobler memorial could any man desire?

ROBERT E. LEE

1807-1870

ULYSSES SIMPSON GRANT

1822-1885

The two great rival generals in the American Civil War were Robert E. Lee and Ulysses Simpson Grant. Lee belonged to a very distinguished family. He was the youngest son of Major-General Henry Lee, and was born at Stratford, Virginia, on January 19, 1807. In 1825, at the age of eighteen, he entered West Point Military Academy, and after four years there he was given a commission in the United States Engineer Corps.

Grant, on the other hand, was the son of a farmer, Jesse R. Grant, and he was born at Point Pleasant, Ohio, on April 27, 1822. As a boy he helped his father on the farm, but he wanted to be a soldier, so in 1839 he also entered West Point, and passed out four years later with the rank of second-lieutenant.

Meanwhile, Lee had reached his captaincy, and when war with Mexico broke out in 1846, both men took part in the fighting. It was during this campaign that the future antagonists became friends. Both served with distinction, and when the war came to an end Lee had risen to the rank of colonel and Grant to that of captain.

It was not until the Civil War, however, that Lee and Grant became famous, and even then much time

elapsed before they took their places as the chief opposing commanders in the field. When the war-clouds began to gather, Lee was a colonel in the U.S. forces, and realising his worth, Lincoln offered him the command of the Northern army. Thereupon Lee was faced with the task of making a vital and agonising decision. Though he owned slaves himself, he was, like Lincoln, opposed to slavery and hoped it would soon be abolished. Like Lincoln, too, he was proud of the nation to which he belonged, and wished wholeheartedly to preserve its unity; yet he was a Virginian, and when Virginia threw in her lot with the Southern States and joined the Confederacy, he knew that he could not fight against his own people. So he resigned his commission in the U.S. army and offered his services to the South. By his own act he became a rebel against the lawful government of the country, not because he disliked that government or the things for which it stood, but because he thought it was the *right* thing for him to do.

Neither Lee nor Grant played any marked part in the early stages of the war, which began disastrously for the North. Perhaps it was the fact that the Northern or Federal States were so much stronger both in wealth and man-power than their Southern or Confederate enemies which made the Northerners too confident. At any rate, they expected an easy victory, and in the middle of July, 1861, to cries of "Crush the rebellion at a blow", General Irvin McDowell moved forward from Washington. He had with him thirty thousand men, and he met the Confederate army, twenty-two thousand strong, close to the small town of Manassas

Junction on the stream of Bull Run. Fighting began on Sunday, July 21. At first the battle went favourably for the Federal forces. Pouring forward to the attack, they drove the Southern troops back a mile and a half until they came up against a reserve brigade under General Thomas J. Jackson. That brigade stood firm and checked the retreat, and the story goes that, seeing how stubbornly Jackson's men were resisting the enemy, a Confederate general cried out, "Look at Jackson, there he stands like a stone wall!" Others heard the cry and took it up, and from that moment General Jackson was known as "Stonewall" Jackson, a nickname he was to deserve again and again in the turbulent time ahead.

Jackson and his brigade had stopped the retreat; still everything pointed to a Federal victory, and messengers hastened back to Washington with the glad tidings. But the Northern commanders had judged too hastily. At a critical moment in the afternoon, when both armies were tired after many hours of fighting, fresh Confederate troops arrived on the field, and began to drive their antagonists back. The retreat thus begun quickly developed into a rout, and by sunset McDowell's army had been reduced to a demoralised rabble, and was fleeing panic-stricken towards the capital thirty miles away.

Thus ended the first great battle of the Civil War. The defeat proved to Lincoln and his followers that it was no swift and easy task they had undertaken, and that they must prepare for a long war, and be ready to fight it with all the vigour at their command. Similar

thoughts must have passed through the minds of the Southern commanders, and during the rest of 1861 the opposing sides were too busy getting ready for the grim struggle ahead to fight any more big battles.

April, 1862, however, found both antagonists prepared, and early in the month General McClellan led a large Northern army against Richmond, the Confederate capital. But the campaign was a failure. McClellan won battles, but he seemed unable to press on to Richmond, though at one time the spires of the city were only six miles away, and in the end he led his army back to the neighbourhood of Washington.

It was during this campaign that Robert E. Lee came to the fore as one of the Confederate generals. After resigning his commission in the U.S. army, he and his wife had retired to their home at Arlington on the Potomac River, but he was not allowed to remain long in idleness. First of all he was made commander of the Virginian forces. He was then raised to the rank of general and became President Davis's military adviser, and when the Confederate general, Joseph E. Johnston, was wounded, Lee was given command of the main Southern army, and retained this position to the end of the war.

The army of the North had failed to capture Richmond more because of over-caution on the part of its general than on account of anything the Southern commanders had done, and at the close of the campaign the opposing forces were much where they had been before fighting started. In the West, however, along the courses of the Cumberland, Tennessee and Mississippi Rivers,

the Northern army had met with better success. And now we catch sight of Ulysses S. Grant, Lee's old companion-in-arms of the Mexican campaign. Grant was not a wealthy man like Lee. Some years before the outbreak of the Civil War he had retired from the army, and in 1861 he was earning a miserly wage as clerk in his father's leather business in the town of Galena, Illinois. Then came the call to arms, and throwing up his clerkship, Grant responded and was made colonel of the 21st Illinois regiment. He did not remain a colonel long, however. Soon he was a brigadier-general, and had been given a command in the west, and on February 16, 1862, with the help of a flotilla of gunboats, he captured Fort Donelson on the Cumberland River and compelled the surrender of 15,000 Confederate troops.

The North was overjoyed at the news. The loss of 15,000 troops was a serious blow to the South, and in a moment Grant, who until then had been practically unknown, found himself famous. He was now in command of an army 40,000 strong, and while General Buell, another Northern commander, occupied the town of Nashville, Grant led his troops up the River Tennessee to Pittsburg Landing (Shiloh) where he was attacked by the Confederate army of the West under General A. S. Johnston.

This attack took Grant completely by surprise. He had expected Johnston to remain behind his entrenchments around Corinth some twenty miles away, instead of which the Southern general moved his troops quietly forward so that by nightfall on Saturday, April 5, his regiments were hidden in the woods within a mile of the

Federal camp. Thus it came about that, soon after sunrise on Sunday morning, the Northern or Union sentries were astonished to see long lines of soldiers moving towards them out of the mist, and instantly raised the alarm.

Now began a tremendous battle. The Northerners defended their positions desperately, but the sudden, unexpected attack had placed them at a disadvantage. Step by step they were forced to retreat, and nightfall of the first day found them with their backs to the river, and with their camp of the previous night in the hands of their enemies.

Still no decision had been reached. The North was not yet beaten, though the advantage so far certainly lay with the South, despite the fact that their noble commander, Albert Sidney Johnston, had been killed. Grant, indeed, would almost certainly have been defeated on the Monday had not General Buell and 25,000 fresh troops arrived in the Northern camp during Sunday night. These reinforcements completely altered the face of affairs. The following morning the battle was resumed, but, outnumbered by their enemies, the weary Confederate troops were unable to continue their triumph of the previous day. Fighting gallantly they were slowly driven back, and soon after noon the order to retire was given and the battered army of the South returned to its entrenchments around Corinth.

Grant did not shine in this battle. He displayed his usual resolution and bravery in face of peril, but there is no doubt that he had been caught unprepared, and his army had been in great danger on the Sunday evening. Of the Northern divisional commanders W. T.

Sherman was the one who outshone all others in the Battle of Shiloh. Sherman had been born in Ohio in 1820. Like Lee and Grant he had graduated from West Point Military Academy, and for a time he had served in the army. He then retired to take up the profession of a lawyer in Kansas, and at one time had been head of a military school in Louisiana. On the outbreak of the Civil War, however, he had re-entered the Union army. He had commanded a brigade at the battle of Bull Run, and after his success at Shiloh he became one of the most trusted of the Northern commanders. You will read more about him presently.

Just a fortnight after Shiloh another important victory was won for the Union cause. On April 16, 1862, a Northern fleet, commanded by Captain David G. Farragut, had entered the Mississippi and appeared off the two strong forts, Jackson and St. Philip, which guarded the approaches to New Orleans. On the 18th the bombardment began, and from then until the 23rd the Northern warships flung thousands of shells into the guardian forts, which replied with a storm of fire from their 126 big guns. For six days this inferno lasted, and then, having still not succeeded in silencing the forts, Farragut decided on a bold stroke. So he issued his orders, and a few hours before dawn on the morning of April 24, he led his fleet up the river and right under the guns of the forts. It was a desperate attempt. The Confederates sent fire-ships down upon the Federal vessels, the guns from the forts and shore batteries filled the air with screaming shells, but though Farragut's flagship was set on fire by a blazing hulk, the bulk of



A FEW HOURS BEFORE DAWN FARRAGUT LED HIS
FLEET UP THE RIVER

the fleet passed the danger zone without serious damage and anchored off New Orleans. Thus when morning came, the defenders of the city found an array of hostile guns trained menacingly upon them, and this so frightened the Confederate leader and his soldiers that they immediately took to flight. Seven days later their place was taken by a Northern army commanded by General Butler, and the fairest city of the South had passed for good into Union hands.

These Federal victories considerably strengthened the grip of Lincoln and his government upon the Western States, but in the East they were less successful. McClellan had failed to take Richmond, and at the conclusion of his campaign, the Northern forces in the East had been united into a new Army of Virginia which was placed under the command of General John Pope. General Pope had fought with success on the Mississippi earlier in the war and was inclined to be boastful. Like McDowell of the previous year, he was going to capture Richmond and end the war at one blow. Unfortunately for him, however, before he could put these grand plans into action, he was met at Bull Run by a Confederate army commanded by Lee and "Stonewall" Jackson, and at the second battle of Bull Run, fought August 29-30, Pope was defeated as completely as his predecessor had been thirteen months before. Two days later a second battle at Chantilly ended in another Federal defeat, after which Pope led his army back to Washington fifteen thousand men weaker than when it had set out.

These events filled the populace of the Northern

capital with panic. Victories in the West would not protect them against their successful foes in the East. On the night of the second battle of Bull Run the sky to the south-west had been crimson with the light of Pope's blazing wagon-trains, and had appeared to the frightened people like a dread omen of worse perils to come. Nor were these fears groundless. Elated by his recent victories, Lee determined to follow them up with an invasion of Maryland, and on September 4 he crossed the Potomac with 55,000 troops. Meanwhile, on the Federal side, Pope had been relieved of his command, and McClellan reinstated as general of the Eastern army, and on September 17, 1862, North and South met on the shores of Antietam Creek.

The battle of Antietam was one of the bloodiest contests of the war. McClellan had some 85,000 men under his command, and all day the fight raged to and fro, and when darkness ended the struggle, 23,000 men had been killed or wounded without either side having won any advantage. The next day both armies were too exhausted to resume the contest, but Lee had already suffered too heavily to hope to realise his dream of conquest, and under cover of the following night he withdrew his army from the field and escaped across the Potomac. His invasion of the North had failed.

Antietam was a drawn battle, though had McClellan been more enterprising he might have won a decisive victory, for the long day's fighting had used up nearly all Lee's ammunition, and left his army at the mercy of a vigorous foe. McClellan, however, missed his opportunity, and allowed Lee to escape, and disappointed at

his general's lack of initiative, Lincoln finally dismissed McClellan from his command and replaced him with General Ambrose E. Burnside.

Meanwhile, Lincoln had decided to strike a blow of a different kind at the rebels, and six days after Antietam he issued his proclamation declaring that all slaves who were the property of people in rebellion against the rightful government of the country were "henceforth and forever free".

The dawn of 1863 found both sides war-weary and disheartened by the contest, which showed no signs of coming to an end. The North's superiority in men and money was more than offset by its lack of good generals. On December 13, 1862, Burnside, finding himself confronting Lee with an army 120,000 strong, decided to attack. Lee was in command of 80,000 men, and occupied a strongly entrenched position on some heights south of the town of Fredericksburg on the Rappahannock River. Disregarding the protests of his subordinate commanders, Burnside decided to launch his army against Lee's centre. It was a mad thing to do, for the point of attack consisted of a hill the approaches to which were protected by a stone wall and trench, while the sides and top of the hill were covered with pits filled with riflemen and many batteries of heavy cannon. Nevertheless, Burnside would not be dissuaded, so the disastrous attack was begun, and six separate assaults were made by picked Federal troops. But bravery was not enough. No sooner were the attacking columns within range than from behind the wall and from the rifle-pits sheets of flame burst forth

and a hail of bullets fell upon the advancing soldiers, while the shots from the cannon higher up the hill ploughed long lanes through their ranks. One after the other the brave but futile assaults were driven back, leaving thousands of dead and dying upon the ghastly field, and when at last night brought an end to the battle, the North had nothing to show for the day's fighting but the loss of twelve thousand men.

After this disastrous defeat Burnside was dismissed from the Northern command. He was succeeded by General J. Hooker, but he was equally unsuccessful, being badly defeated at the battle of Chancellorsville (May 3-5, 1863), and in due course he was superseded by General George G. Meade. It was at Chancellorsville that the South suffered an irreparable loss in the death of "Stonewall" Jackson. This remarkable man, who next to Lee was the greatest commander on the Southern side, had begun life as a soldier, but finding that he disliked war, he had resigned his commission and become a school teacher. Then had come the Civil War, and thinking it his duty to fight for the South, he had enlisted again, and had soon proved his worth as a dashing leader. War, however, did not alter his nature. Jackson was a very religious man, and before every engagement he spent a long time on his knees praying to God for guidance, and perhaps it was the strength thus gained which made him so utterly fearless in battle. The pity is that the bullet which killed him was fired by one of his own men. It happened at the end of a day of victorious battle. Accompanied by his staff Jackson had ridden forth to examine the ground in front of his

lines, and on returning, he and his commanders were mistaken for a party of the enemy and were fired upon by the sentries. One of the bullets found a mark in Jackson's body and caused a mortal wound from which he died some days later, leaving a vacant place among the Confederate commanders which none could fill.

Despite her successes the lot of the South was far from happy. The great invasion of the North which had ended at Antietam had failed, and these battles which her armies won were not decisive. Moreover, she was short of money to pay for the war, and was suffering severely from the blockade which the strong Federal navy kept upon her ports. So much had the value of money declined indeed, owing to the printing of hundreds of millions of dollars of worthless paper money, that a pair of boots might cost as much as four hundred dollars (£80), and the most common articles in everyday use could only be bought at a price out of all proportion to their value.

Such was the position in the East in the early months of 1863. In the West, on the Mississippi, a Confederate force under Van Dorn had occupied the great fortress of Vicksburg, and in the autumn of 1862 Grant had begun his attempts to capture the place. In two battles, fought in May 1863, he defeated two Confederate armies and drove the survivors within the defences of Vicksburg. He then began preparations to assault the fortress, and on May 22 a grand attempt was made to carry the place by storm. But the garrison fought with desperate bravery and drove off the assailants with a loss of 3000 men killed or wounded. Thereafter Grant

tried no more direct attacks but settled down to besiege the city.

The siege lasted six weeks. Every day the Federal forces carried their trenches nearer to the doomed fortress, while day and night the guns from shore batteries and from the Federal warships on the river rained shells upon the harassed garrison. There was no safety anywhere. The shells burst in the streets and on buildings, and wherever they fell they spread death and destruction so that the miserable inhabitants were forced to leave their homes and seek shelter underground. Soon food started to run short, mule flesh and rats were eagerly consumed, and people began to die from sickness and exhaustion, as well as from the fire of the besiegers, until at last there was nothing left to eat and the garrison and inhabitants were faced with the alternative of surrender or death by starvation. The end came on July 3rd. On that day, realising that further resistance was impossible, the Confederate commander raised the white flag, and the following day the victors took possession of the fortress. With the surrender of Vicksburg 37,000 prisoners of war fell into Federal hands, together with 60,000 muskets and over 170 cannon, but more important than these spoils was the fact that the capture of the city gave the North complete command of the Mississippi and cut off the Southern States of the West from fruitful sources of supplies in Texas and Mexico. Grant had won a great victory for the North.

Meanwhile, in the East, equally stirring and far-reaching events had been taking place. Realising the

unsettled condition of the North, and how tired the people were getting of a war which went on and on without end, Lee and President Davis had decided upon a bold stroke. If they could win a great victory now, it was quite possible that, weakened by internal quarrels, the Union might collapse in ruin, and the South would be left the conqueror. Accordingly, on June 15, 1863, Lee crossed the Potomac in a supreme effort to bring the conflict to a decisive end. In front of him, barring his path, was General Meade, who had succeeded General Hooker in command of the Federal forces, with an army 80,000 strong, but Lee himself was at the head of the finest army he had so far commanded, full 70,000 splendid soldiers, and he marched forward with high hopes for the future. A fortnight was spent in preliminary operations, and it was not until July 1 that Lee's advance guard came into contact with the forward troops of Meade's army near the small hamlet of Gettysburg. In a short time the battle became general, and it was soon clear that the Confederates were driving their enemies back, and the first day's fighting ended with the advantage all on the side of the Southern army. Night, however, brought reinforcements to both sides. General Meade arrived with the main body of his forces, and the second day dawned with the two armies facing each other in almost equal strength. The vital hour was at hand.

Fighting was long in starting on the morning of July 2. The two armies lay confronting each other in a large semicircle, and both seemed loth to start the battle which might end with such dire results to one side or

the other. Presently, however, General Sickles, in command of the Federal left, advanced his troops, but he was met by a withering fire which forced him back to his original position. Meanwhile, Lee had sent General Early to attack the Union centre. This assault was made with desperate bravery. Right up to the Federal lines surged the Confederate troops, and there engaged the defenders in a violent hand-to-hand struggle, but beyond that they could not go, and finally they were compelled to fall back.

Thus far the battle had been even. Neither side could claim any definite advantage, though on the Confederate left General Ewell had attacked the Federal right wing, which rested on a height known as Culp's Hill, and after a short but savage encounter had captured the position. This brought the second day's fighting to an end. Both sides had lost about 10,000 men, and still victory trembled in the balance.

The third day of the battle opened with a terrific bombardment of Culp's Hill by the Federal guns. For four hours the defenders were pounded with shells, then the Union infantry surged forward to the assault and drove the dazed Confederates out of their position. So almost at the very beginning of the third and last day, the line of battle was exactly as it had been at the commencement of the main encounter.

But the crisis was close at hand. Lee was determined to force a decision, and having massed almost all his artillery on a ridge facing the Federal centre, he began an intense bombardment of that position. To this the Union cannon answered with equal force, and for the

best part of two hours the violent artillery duel continued, the thunder of the guns rising to a deafening roar of sound. Then the Confederate cannon ceased fire, and fifteen thousand men, led by General Pickett, advanced to the assault. Gaily they marched forward. These men were the pick of the Confederate army, they knew the desperate nature of the task before them; yet they marched to the attack with colours flying, nor did they even hesitate when the shells from the Union cannon began to explode among their ranks. On they went, filling the gaps in their lines as quickly as they were made, and so at last they came within musket-range of the enemy's lines. Now a deadly hail of bullets fell upon them, but they answered shot with shot, and quickened their march to a charge. Forward they drove, right up to the Federal entrenchments, and actually forced their opponents back from a stone wall behind which they had been sheltering. For a moment, indeed, it seemed that their charge was going to succeed. A hundred men led by General Armistead actually forced their way into the Union lines and planted the Confederate flag upon their fortifications, but beyond that point mere valour could not carry them. Armistead fell mortally wounded. From the front and flanks a storm of lead poured into the attackers' ranks, killing men by hundreds, and at last, unable to endure any longer, the gallant remnant turned and fled.

So ended the battle of Gettysburg. Fifty thousand men had fallen in the three days, and there was nothing left for Lee but to lead his shattered army back to Virginia. The great victory plan had failed.

The capture of Vicksburg and the defeat at Gettysburg practically decided the fate of the war. The South struggled on for nearly two more years, but they were fighting for a losing cause. Grant had been made a major-general in recognition of his capture of Vicksburg, and given command of the Western armies. In a three days' battle at Chattanooga (November 23-25, 1863) he won a great victory over the Confederates, and forced their lines back to the east of the Alleghenies.

Grant was now recognised as the leading military genius of his side. In March, 1864, Lincoln created him a lieutenant-general, and gave him command over all the Union armies. The first use he made of his new authority was to march on Richmond early in May. There followed the famous Wilderness campaign which lasted forty days, and in which Grant was foiled in his attempt to capture the Confederate capital by the genius of Lee, who inflicted upon the Union army the loss of nearly sixty thousand men.

This defeat caused great depression in the North, and the feeling was increased to something like panic in Washington when, on July 10, General Early with 15,000 Confederate troops approached within a few miles of the capital. But the danger passed, thanks to the arrival in the nick of time of Federal reinforcements sent by Grant, and Early retired.

Meanwhile, Sherman had been given command of the Union armies in the West in succession to Grant, and on September 3 he entered the city of Atlanta in Georgia. He remained there more or less until November 15, and then began his famous march to the sea.

Sherman had sixty thousand men under his command, and for three hundred miles he led them across the State of Georgia. There was hardly any opposition. This march was to be a lesson to all the rebel States, and the Federal soldiers passed through the land like a swarm of locusts, living upon the very best and leaving a broad swath of destruction behind them. Factories and public buildings were burned, the railways were torn up, horses and mules requisitioned, and vast supplies of cotton were destroyed as well as all military stores. Nothing was left which could possibly help the State to carry on the war. It was a terrible lesson, and the march ended with the capture of Savannah, which Sherman entered on the 21st of December. Three days later, on Christmas Eve, he sent to Lincoln this telegram, "I beg to present to you, as a Christmas gift, the city of Savannah, with one hundred and fifty heavy guns and plenty of ammunition, and also about twenty-five thousand bales of cotton."

The end was very near. It was evident to everyone that the Confederates could not go on fighting much longer, and on February 3, 1865, delegates from the South met President Lincoln to discuss terms. Lincoln's demands were simple. The Union must be restored, he said, and all slavery abolished. These terms, however, appeared too harsh to the Southerners and the conference ended without result.

So the dreadful war was resumed. Towards the end of March Grant renewed his attack upon Richmond, and this time he was successful, and on April 3 the Federal troops entered the city which had defied them

so long. Surely now the Confederates would realise that they were beaten? Grant hoped so, for, as much as anyone, he wanted to end this cruel war, and on April 7 he sent Lee the following message: "General, the result of the last week must convince you of the hopelessness of further resistance." Lee agreed. He knew that the Southern cause was lost, and on April 9 the rival commanders and old friends met to discuss terms of surrender at Appomattox Court House. The conditions were simple and generous. The Confederate soldiers were to lay down their arms, but they were to be allowed to keep their horses "for the spring ploughing" as Grant remarked. Lee read the terms through, thanked Grant for his leniency and signed, and so at last the dread scourge of civil war was lifted from the land. From that day to this the union of the United States has been unshakable.

What of the after-lives of the two men who played such a leading part in this great drama? In August, 1865, Lee accepted an offer to become President of the Washington College at Lexington, a post which he occupied until he died on October 12, 1870. During these years he did everything he could to dispel the bitterness the war had left behind and to make the country strong and united again.

Grant had a longer span of life before him. In 1869 he became President of the United States, and continued in that position for two terms until 1877. On retiring he went for a tour round the world, and on his return he went into business. But two of the men with whom he entered into partnership were rogues, and

Grant lost £30,000. Illness then seized upon the old warrior who, worried at the thought of his wife and family being left penniless after his death, set to work to write his autobiography in the hope that by so doing he would rebuild the family fortunes. Week after week he laboured, encouraged by the American writer and publisher Mark Twain who had promised to produce the book. His illness increased in severity, but Grant would not give in, and at last the great work was completed and he laid down his pen with a sigh of relief. Three days later, on July 23, 1885, Grant died at Mt. McGregor, near Saratoga. But he had done what he had set out to do, for his book brought his family nearly half a million dollars, about £100,000.

Grant was buried in an imposing granite tomb on the bank of the Hudson, and to-day the monument is one of the sights of the city of New York. Next to Lincoln, he more than any other had worked and fought to preserve the union of the United States, and for that, if for nothing else, he deserves a place among the heroes of that nation.

RALPH WALDO EMERSON

1803-1882

HENRY WADSWORTH LONGFELLOW

1807-1882

In 1803 there lived in Boston, Massachusetts, a Rev. William Emerson. He marked the seventh generation of a long line of ministers. Already he had two children, and on May 25, 1803, his wife presented him with a third, a boy whom they christened Ralph Waldo. Within the next eight years three more children were born into the family, then the Rev. William died, leaving his widow ill provided to face the world, and with six young children to rear, all under ten years of age.

Mrs. Emerson did not let her troubles overwhelm her. She was both capable and courageous, and she set to work to bring up her young family. To eke out her slender means she took in boarders, and with the money so earned, she was able to send her boys regularly to school. They, on their part, did all they could to make things easier for her, and every day, on their return from school, they helped with the house-work. It was not all work in the Emerson household, however. Encouraged by their mother, and an aunt, Miss Mary Emerson, the boys spent much of their spare time reading the works of great poets and historians, and it was in this atmosphere of refined poverty and hard work, tempered with

delightful, intellectual pursuits shared in common, that young Waldo passed his boyhood days.

He was not quite three years old when he first went to a small private school. He stayed there till he was eleven, when he entered the Latin School, where he learned Latin and Greek. History interested him, too, and he became quite clever at writing poetry, but he was no good at sums, and mathematics floored him completely. From the Latin School he went on to Harvard College in 1817. He was then fourteen years of age, and Emerson passed four happy years there, filling his mind with the best literature, but without distinguishing himself beyond winning three prizes, one for oratory and two for a couple of rather dull essays.

Young Emerson had had his dreams as all boys will. He had often pictured himself standing in the pulpit of a great church, as he had seen his father do, and swaying vast congregations by the brilliance and fervour of his oratory. Now, as he grew to manhood, this dream persisted, though perhaps not quite so gloriously as of old. He still wanted to follow in his father's footsteps, to be a minister as he had been, but money was scarce and he had to earn his living and help his family at the same time. So on leaving college he went to Boston and became an assistant teacher in his brother William's school for young ladies. But he was not happy. Trying to drive knowledge into the brains of young ladies, who were probably not too bright or too desirous of learning, was to Emerson an irksome, heartbreaking task. It was so different from his dream, and at last, in 1823, he began to study for the ministry. Six years later he was

ordained, and before long he was minister of the Second Church in Boston.

Part of Emerson's dream had come true, but now, as so often happens, he discovered that the reality was different from what he had hoped and imagined it would be. Emerson was a novel thinker, which means that he had his own ideas about many questions and did not merely accept what he had been taught to think or what most people about him believed. This applied to religious matters as well as to other subjects, and before long he discovered that he could not agree with some of the things he as a clergyman was supposed to believe in and uphold. This, for a man as honest and upright as Emerson, was enough to make him resign his ministry, which he did in the summer of 1832, and so, at the age of twenty-nine, he found himself without a vocation in life and with the great dream of his boyhood shattered. At least so it must have seemed then, but as a matter of fact that dream was to come true in the future.

This was a very unhappy period of Emerson's life. In 1829 he had married a beautiful young girl of eighteen named Ellen Tucker, but her good looks were the fragile beauty of ill-health, and she died of consumption early in 1832, a few weeks before he gave up his ministry. Emerson felt her loss terribly, while added to this trouble was anxiety for two younger brothers, Edward and Charles, whose health broke down about this time. Eventually both died, Edward in 1834 and Charles in 1836.

No wonder that, with all these worries and sorrows,

Emerson's own health showed signs of failing, and with no ties to keep him at home, he decided to seek forgetfulness and new health in travel abroad. There was another reason, too, why he wanted to visit Europe. He wished to meet Walter Savage Landor, Coleridge, Wordsworth, and Thomas Carlyle. He had read their works, he knew them by their writings, but he wanted to see them in the flesh, to learn what manner of men they were. Accordingly, on Christmas Day, 1832, he left Boston in a small trading vessel bound for the Mediterranean. Such a voyage was quite an adventure in those days. The food consisted chiefly of salt pork, beans and ship's biscuits, but though both fare and quarters were rough, Emerson picked up health amazingly during the voyage, and was a new man both in mind and body by the time he reached Europe.

There he visited Italy, Sicily, France and Great Britain. In Italy he met Landor, and he made the acquaintance of the poets Coleridge and Wordsworth when he visited England, while he travelled up to Dumfriesshire in Scotland on purpose to visit Thomas Carlyle. This was the beginning of a great friendship between the two men which was to last for life, and though for most of the time the Atlantic Ocean separated them, they kept up a regular correspondence for nearly forty years.

Emerson returned to America in 1833, and made his home with his mother in the old manse in Concord. He had now to make for himself a new career, for he never again took charge of a parish. Perhaps something still remained of his youthful longing to sway great

audiences by the power of his oratory. At all events he desired to help his fellow men in the best way he could, and so, no longer able to preach regularly from a pulpit, he did the next best thing and became a public lecturer in Boston. In this he soon proved that he had made a wise choice, and before long he was the most popular lecturer with the educated classes of the American people.

Meanwhile, Emerson had bought a big, airy, old house standing in a spacious garden in Concord, and here, in the autumn of 1835, he brought his second wife, Lydia Jackson of Plymouth. In this house he passed the rest of his life. His marriage was a very happy one, he was a good father, and the friend of all men and admired by all. He was always a man of original ideas, and sometimes he tried them out in his own household, but he was no crank and was always ready to abandon them if he found they did not work. He believed in the equality of men, and tried to practise it by having his servants take meals with him and his family. In this case it was not the family who protested, but the domestics, who announced that they did not want equality and much preferred to have their meals in the kitchen as they had always been used to doing. At another time he thought he would become a vegetarian, but finding that he derived no particular benefit therefrom he gave it up. Henry Thoreau, the famous author of *Walden*, was for some time a member of this happy household, where he occupied his time working in the garden and accompanying Emerson on long walks about the countryside.

Emerson was a writer and poet of unusual gifts,

though his work was so laden with thought and meaning that it was often difficult to understand. It was chiefly as a public lecturer, however, that he won fame, and people's attention was first attracted to him by an address he delivered at Harvard in 1837 in which he urged American writers to branch out in a style of their own and to be less subject to English influences. Thereafter he became increasingly popular with his countrymen. He was learned in a great number of subjects, and he lectured on literature, biography, history, philosophy, politics, art, and many other topics. His boyhood dream had, indeed, come true, for in his country there was no public speaker who swayed his fellow men as he did. He was an inspired orator, both as regards his elocution and his range and choice of words, and these gifts, added to his fine face and benevolent presence, cast an irresistible spell over his listeners. James Russell Lowell, another talented American, said of Emerson:

"I have heard some great speakers and some accomplished orators, but never any that so moved and persuaded men as he. There is a kind of undertow in that rich baritone of his that sweeps our minds from their foothold into deeper waters with a drift we cannot and would not resist."

And again:

"We used to listen to that thrilling voice so charged with subtle meaning and subtle music, as shipwrecked men on a raft to the hail of a ship that came with un hoped-for food and rescue."

For a few years, from 1840 onward, Emerson edited a quarterly magazine called *The Dial*, in which many of his essays and poems first appeared. In 1847 he paid a second visit to Great Britain. He stayed a week with Carlyle in the latter's house in Chelsea, and then began a lecture tour through England and Scotland, visiting Manchester, Liverpool and Edinburgh. He then crossed the Channel and visited Paris, and finally returned to America in July, 1848. Some of the lectures Emerson gave during this tour may be read in a book published under the title of *Representative Men*, and another work, *English Traits*, records his impressions of the visit. Emerson was a great admirer of Englishmen though, like many another visitor from overseas, he did not wholly understand them.

In the Civil War Emerson was an ardent supporter of the Union and declared that slavery must be abolished if freedom was to be maintained. After his second trip to Europe, and during the years which followed right up till 1875, Emerson often used to visit the "Saturday Club" at Boston, where at friendly dinners he met and talked with other famous American men of letters. In 1872 he visited Europe again and travelled as far as Egypt. This was the last time he left America. On his return his friends noticed a gradual failing of his powers. His brilliance became dimmed, but not his kindness or his serenity. The last ten years of his life were passed happily in his home at Concord, from which he departed for the last journey on April 27, 1882, dying as tranquilly and peacefully as he had lived. His countless admirers, at home and abroad, looked on him as some-

thing like a prophet, and the influence of "the Sage of Concord" is by no means exhausted even to this day.

Emerson was a man who all through life tried to live unselfishly. That which he believed to be good and true and beautiful he did not keep to himself but passed on in his public lectures and writings for the benefit of all who would hear or read. His mission in life, to quote his own words, was: "Seeing whatever I can, and telling what I see."

Emerson was only one of a number of great American writers who lived at this time. Among the most famous were William Hickling Prescott and John Lothrop Motley, the historians; Edgar Allan Poe, poet and author of a wonderful group of uncanny tales; Nathaniel Hawthorne, one of America's greatest fiction writers; James Russell Lowell, the poet and essayist, who was one of Emerson's greatest admirers; Henry Wadsworth Longfellow, and many others. Several of these men Emerson knew and met at the "Saturday Club", but of them all perhaps the most loved at home and the best known abroad was Longfellow the poet.

Henry Wadsworth Longfellow was born at Portland, Maine, on February 27, 1807. He was of Yorkshire descent, for an ancestor, William Longfellow, had emigrated to Massachusetts from England in 1676. Henry's childhood was a very happy one, and later in life he recalled his memories of those days in the haunting lines of "My Lost Youth":

Often I think of the beautiful town
That is seated by the sea;

Often in thought go up and down
The pleasant streets of that dear old town
And my youth comes back to me. . . .

I remember the black wharves and the slips,
And the sea-tides tossing free;
And Spanish sailors with bearded lips,
And the beauty and mystery of the ships,
And the magic of the sea.

There are more verses recalling other memories and the beautiful and interesting surroundings among which Henry passed his youth. His parents were educated, refined gentlefolk who did all they could to develop their son's talents, and from his mother especially he received encouragement, for it was from her that he inherited his poetic nature. His first poem to be published was written when he was fourteen. Like most healthy boys he was thrilled by the stories of Red Indians and their battles, and this early poem, entitled "The Battle of Lovell's Pond", was a description of just such a fight which had taken place near his home.

In 1821 Longfellow entered Bowdoin College at Brunswick, and from there he graduated with honours in 1825. At this time no one realised he was to become a great national poet, and his father seems to have hoped that Henry would follow his footsteps and study law. For a time, indeed, the boy worked in his father's office. Needless to say, Henry's poetic nature rebelled against the dry-as-dust law business with its rigid regard for cold facts and dislike of any such thing as imagina-

tion, and when the governors of Bowdoin College offered him a professorship in modern languages, for which he had proved to be especially gifted, he accepted the appointment with gratitude. Better still, the offer carried with it an opportunity to see the world, for, in order that he might be thoroughly fitted to undertake his new task, the college authorities ordered foreign travel, and sent him to Europe for three years.

They were wonderful years for the young poet. Europe with its ancient legends and history, its relics of bygone civilisations, and venerable towns and buildings, laid a spell upon the traveller, fresh from a country where all things except nature were comparatively new, which he could not resist. This spell lasted all his life. The three years he now spent in learning languages, and travelling in Italy, Spain, France, Germany, Holland and England, were to fill his mind with old-world stories and history to such an extent that he ceased to be pure American in thought, and in future years he chose his subjects as much from Europe as from his native land.

Longfellow returned home in 1829 and took up his professorship at Bowdoin College. In 1831, in his twenty-fourth year, he married a beautiful and intelligent girl named Mary Story Potter. Meanwhile, all the time he could spare from his work as a professor of languages was devoted to making a series of translations from the Spanish, and for some years he did not publish a single original poem. At this time he was, indeed, still regarded rather as a clever teacher of languages than as a coming poet, and in 1835 he was given the chair of foreign languages at Harvard University.

This led to a second European tour and a further course of study. He was accompanied by his wife, but to Longfellow's great grief, she died at Rotterdam in Holland on November 29, 1835. This time the traveller visited the Scandinavian countries and Switzerland, and finally returned to America in December, 1836.

The loss of his wife had a great effect on Longfellow. Sorrow often brings out the best in a person, and so it was with him, for on his return to America, he put aside his translations and devoted his spare time to his true mission in life, the making of poetry. First appeared *Hyperion*, a prose romance based on his travels, and in the same year, 1839, he published *Voices of the Night*, his first volume of original poems. This was followed in 1842 by another small volume in which appeared such famous pieces as *The Village Blacksmith*, *The Wreck of the Hesperus*, and *Excelsior*, and in the same year he crossed the Atlantic once more and spent the summer on the Rhine. He returned home in October, and during the voyage he wrote a series of poems entitled *Poems on Slavery*. This was nearly twenty years before the outbreak of the Civil War, but the battle between those who wished to abolish slavery and those who were determined to maintain the system had already begun, and these poems of Longfellow's definitely showed that his sympathies were with the abolitionists.

The following year he married again, his second wife being Frances Elizabeth Appleton of Boston. Soon afterwards he bought Craigie House, a fine old colonial mansion, surrounded by lofty elms, and standing in a large garden, which had been Washington's head-

quarters at the beginning of the War of Independence. To this beautiful home Longfellow brought his new wife; here they had their family, two boys, Ernest and Charles, and three girls, Alice, Allegra, and Edith, and here Longfellow was to live with but occasional absences till the day of his death.

It was a very happy home and happy family; indeed, it would have been difficult for a home to be otherwise with such a man as Longfellow at the head. He was, we are told, a man of most gracious nature, tender, courageous and with a tremendous charity which made him think the best of all men, and give of the best that was within him. No one ever received a discourteous word from him, and a request had only to be made and, if it was within his power, he would grant it. Fame made no difference to Longfellow. He was always the same simple gentleman, accessible to all so that anyone who wished to see him could do so, and no young author needing encouragement ever looked to him in vain.

In appearance he was as handsome as his character was fine. He was short, actually below middle height, but broad-shouldered and well made. It was his head and face, however, which arrested attention. Charles Kingsley, the English author, described Longfellow's face as the most beautiful he had ever seen. His forehead was broad and high, and beneath it gleamed large, well-spaced eyes alight with interest and a warm, friendly glow. The nose was straight and handsome, the mouth and chin were firm, but with the firmness of a brave, generous nature, like those of a Greek statue. In early life his hair was dark, but age turned it to

a silvery white, and with beard, whiskers and moustache similarly bleached, he looked in his later years like some great prophet of old dressed in latter-day clothes. Add to these excellencies a rich, low, musical voice and you have a picture of one of the most loved and honoured Americans of his day.

Such was Longfellow the poet and professor of languages. This professorship, indeed, he retained until 1854, but amid his work as a teacher he found plenty of leisure in which to write poetry. *Evangeline*, among the best-loved of his longer poems, appeared in 1847, and in 1851 *The Golden Legend* was published. In this long poetical drama he retold a German legend of the middle ages, and in it we see again a reflection of his travels in Europe. Four years later, in 1855, when he had resigned his professorship and was able to devote his whole time to poetry, he shook off the spell of the Old World, and dipping into the wild legends of his own land, he produced *The Song of Hiawatha*, perhaps the most widely known of all his poems. This was followed in 1858 by another long poem, *The Courtship of Miles Standish*, in which the lovers of the story, John Alden and Priscilla, were actually his Plymouth ancestors who came over to America with the historic *Mayflower's* company.

But now, outside Longfellow's happy home, the clouds of war were gathering dark and ominous. In 1861 the Civil War broke out, and in the same year a still more grievous personal loss occurred to darken the poet's life. This was the death of his wife under particularly terrible circumstances. She was wearing a light

summer dress at the time, and unknown to her it caught fire, and before anything could be done she had been burned so badly that she died of her injuries.

It was a long time before Longfellow recovered from this blow, indeed, the sense of loss remained with him all his life, as is proved by the touching words of a sonnet, entitled *The Cross of Snow*, which was found among his papers after his death. It begins:

In the long, sleepless watches of the night,
A gentle face—the face of one long dead—
Looks at me from the wall, where round its head
The night-lamp casts a halo of pale light.

Beyond this sonnet Longfellow never mentioned his loss in any of his poems, for he was not a man to wear his sorrow openly to the discomfort of others. He had five motherless children to care for and make happy, and in a poem published in 1865 he tells us something of their life together. It is called *The Children's Hour*.

Between the dark and the daylight,
When the night is beginning to lower,
Comes a pause in the day's occupations
That is known as the Children's Hour.

From my study I see in the lamplight,
Descending the broad hall stair,
Grave Alice and laughing Allegra,
And Edith with golden hair. . . .

But the whole poem should be read and remembered.

In 1867 Longfellow's translation of Dante's *Divine*



THE CHILDREN'S HOUR

Commedia appeared, and no doubt the occupation he found in translating into English one of the world's greatest poems helped him to bear the loneliness which even his children could not dispel. The following year he visited Europe for the fourth and last time, and wherever he went people accorded him the honour and distinction his fame and character merited. He returned to America in 1869, and in the succeeding years he produced some of his finest if not his best-known poems. On March 15, 1882, nine days before his death, he wrote *The Bells of San Blas*, the final lines of which form a fitting close to the life of a man whose faith in good was so strong that he never looked backward, but always saw the best there was in all things.

Out of the shadows of night
The world rolls into light;
It is daybreak everywhere.

To-day Longfellow's bust stands in the Poets' Corner of Westminster Abbey. He is the only American poet who has been so honoured, and its presence there is a mark of the affection in which this great and lovable man was held by English people.

THOMAS ALVA EDISON

1847-1931

On February 11, 1847, a little boy was born at Milan, Ohio, who was to have immense influence upon the lives of people all over the world. To-day that influence is felt as strongly as ever; indeed, with most of us, not a day passes when we do not experience its effect in one way or another. Thus when we listen to the gramophone, tune in the wireless, speak over the telephone, switch on the electric light, enjoy ourselves at the cinema, go for a ride in a car, or tap out a letter on a typewriter, we are to a greater or lesser degree actually benefiting by the work this little boy did when he grew to manhood. His name was Thomas Alva Edison.

By this time you will have guessed that Edison the man was an inventor. Not that he was entirely responsible for all the inventions mentioned above. New things are not often created in that way. Usually they result from the accumulated experiments and ideas of several people, collected together and improved upon until one man succeeds in achieving a definite object. For example, while Edison was personally responsible for the invention of the electric lamp which lights our homes, the phonograph which was the forerunner of the gramophone, and the Edison electric storage battery which helps our cars to go, he merely assisted in the creation of the typewriter, wireless telephony, the motion picture and the telephone. Yet in each case his work was

of vital importance, and without his aid the perfecting of these various inventions would have been delayed.

Edison's parents were of mixed Dutch and Spanish descent. His father was a shingle merchant, that is to say he sold wooden tiles for roofing, so young Thomas began life without the advantages supposed to be derived from wealth and position. Still the Edisons were not exactly poor. Thomas's father did quite a good trade until the shingle business began to decline in 1854, and then the family moved to Port Huron, Saint Clair County, Michigan, where Edison senior set up as a grain and timber merchant.

Thomas was seven years old at this time. He was an unusual sort of boy. Few people understood him. The majority thought him stupid, and he got many a thrashing from his father for being a lazy, mischievous young rogue, while after he had been three months at the local school, his teacher expressed the opinion that his brain was addled.

That was the end of Thomas's school days. The boy had one staunch friend who stood up for him no matter what he did. This was his mother. She did not believe that her boy was stupid and a good-for-nothing, as appeared to be the general opinion of their friends and neighbours. She believed that there was something in Thomas, some spark of hidden genius perhaps, which the good, ordinary, commonplace people of Port Huron could not understand, and that in actual fact it was not he but they who were stupid. At any rate, she was not going to have any foolish school-teacher putting it into her son's head that he was deficient in brains, so she

took him away from school, and set to work to teach him herself.

She was well fitted for the task, for she had been a school-mistress before she married, and now she did all she could to develop that hidden something in Thomas which she believed was there. Mrs. Edison was a very wise woman. She knew that to succeed in this world a young man must have confidence in himself, and Thomas's confidence had not been increased by his teacher's dislike, his schoolmates' ridicule, and his father's lack of sympathy. With his mother as his teacher, however, matters soon took a different shape. Seeing her confidence in him, he gained fresh confidence in himself. She taught him to write a beautiful hand. From her he learned some elementary science, but most important of all she bred in him a zest for learning, and taught him how to teach himself, so that he would read all books that came his way and absorb their knowledge like a sponge.

Thomas was without doubt very lucky in his mother, but he would never have done what he did but for the genius within him which his mother helped to bring forth. As quite a small boy he developed a passion for what is now commonly known as "stinks". He fitted up a laboratory in the cellar of his home, and furnished it with over two hundred bottles filled with chemicals of which only he knew the right names, for every one was labelled POISON in large letters to scare away inquisitive people.

That cellar was young Thomas's haven of refuge from all troubles, and he was never happier than when he

was conducting some weird, wonderful, and smelly experiment. The wonder is that he did not burn his father's house down or blow it sky-high, but no such unfortunate event occurred. Of course his pocket-money did not run to buying many chemicals, so when his supplies ran short, he went out and got a job, and with the money thus earned he replenished his stock.

At that time Port Huron was already connected with Detroit by railway, and one day, urged on by the need for some ready cash, Thomas obtained permission to sell newspapers to passengers travelling by train between the two cities. This job was to lead to much greater things, but at first Thomas was nothing more than a newspaper boy.

He soon discovered, however, that there was plenty of time for other things. There was always a long wait between trains at Detroit, and those hours, which most boys would have idled away, Thomas spent at the Detroit Public Library, where he read numbers of books he could never have obtained at home. So Thomas turned his leisure hours to good account, but still there was a great deal of time wasted on the train, and he hated wasting time. At the best he could only sell one paper to each passenger, and when that was done there was nothing else to do. Thomas thought longingly of his laboratory. His work as a newsboy was interfering with his hobby, so now, without obtaining permission, he removed a large part of his laboratory from his father's cellar to the van in which his newspapers were carried, and thereafter, when he was not selling newspapers, he carried on with his beloved experiments.



WHEN NOT SELLING NEWSPAPERS EDISON CARRIED
ON WITH HIS EXPERIMENTS

These events in Thomas's life took place in 1859, and in the same year this amazing boy, not yet thirteen years old, opened a vegetable store in Port Huron. Certainly he could no longer be blamed for wasting time, and he continued to sell papers and work in his train laboratory until 1862, when he had a brilliant idea. All this while he had been selling other people's newspapers when he might just as well have been selling his own and making a larger profit. This reflection was enough for young Edison, and before long he had set up a small printing press in his van alongside his laboratory and newspapers, and was printing and selling his own news-sheet in which he recounted all the items of local interest and gossip he collected along the line.

Thomas called his newspaper *The Weekly Herald*. It proved to be a success, and there is no knowing how long he might have continued combining his job as newsboy with his laboratory experiments and printing but for an unfortunate accident. One day, as the train was passing over a particularly rough piece of line, a stick of phosphorus was jolted off the laboratory bench on to the floor, where it ignited and set the van ablaze. That was the end of Thomas's scientific experiments on a railway train. The fire was put out, but so were all the precious bottles filled with chemicals, and Tom received a cuff on the ear from the irate guard. It turned out to be a heavier punishment than he deserved, for it was the beginning of a deafness which was to afflict him for the greater part of his life.

After this unfortunate affair Thomas went on selling papers for a while, and then one day something hap-

pened which was to alter the whole course of his life. He was waiting at the station for his train to come in, when a little child wandered on to the track and started playing on the rails along which a truck was being shifted. Thomas saw the child's peril just in time, and leaping forward, dragged it aside and restored it to its frightened father safe and sound. The father turned out to be a telegraphist, and, anxious to reward Thomas for his deed, the grateful man offered to teach him his trade free of charge.

Here was a chance not to be missed. Thomas accepted the offer at once, and proved himself such an apt pupil that within a year he had been installed as telegraphist at Port Huron. From there he was soon transferred across the border to Stratford Junction, Ontario, where he was given the job of night operator. Night work was often a sleepy business, so to make sure that the new operator kept awake, it was the custom to put through hourly signals from the American side of the frontier, to which Thomas was expected to make a reply. This did not suit young Edison at all. He was, of course, supposed to rest during the day, but he wanted the day for study and experiments, with the result that he sometimes went short of sleep and found it necessary to make up arrears at night when he was supposed to be awake. At first the hourly signals interfered with his slumbers, but the budding inventor soon found a way out of the difficulty. He made a simple contrivance which he attached to a clock. This he joined up with the telegraph line, and fixed it in such a manner that every hour when the signal came through the correct reply

was automatically tapped out over the line. This answered very well, and Thomas managed to secure many hours of precious sleep until the people at the other end of the line began to get suspicious. The reply always came through so pat; yet sometimes, when it was necessary to send an ordinary message to Stratford Junction between the hours, no answer would be forthcoming. Accordingly someone was sent to investigate, and Edison's ingenious device was discovered.

Although he was thus inclined to shirk his work in order to have more time for his reading and experiments, Edison was soon one of the fastest telegraphists in America, and he won many speed contests with rival operators. Now for the next five years he wandered about the country working as a telegraphist at one place after another. But he was not content. All the time he was continuing his reading and getting to know all he could about telegraphy and that great and mysterious force, electricity, upon which it depended. In 1868 he was employed by the Western Union Telegraph Company in Boston, and it was while there that he produced his first real invention. With his mind full of the wonders of electricity it occurred to him that a considerable saving of time would be made if the members of the Senate and House of Representatives could record their votes for or against a bill by means of electricity instead of by the old and clumsier method. With the enthusiasm of youth he imagined he had hit on a great idea, and took it for granted that such a machine would be accepted as filling a much-needed want. So he set to work and invented an electric vote-

recorder, and then travelled to Washington to demonstrate it in the right quarter. Alas, for his high hopes! Instead of the welcome he had anticipated for his invention, he was informed that an electric vote-recording machine was the last thing Congress either required or desired. So he returned to Boston a disappointed but a wiser inventor.

He was not discouraged, however. His first invention had turned out a failure, but he felt perfectly sure he could invent other things which would prove successful. He was tired of being a telegraphist, too. It was a job which led nowhere, so in 1869 he threw up his employment and went to New York. This was a bold thing to do, for at the time he was desperately poor, with hardly enough money to pay for a night's lodging. As it happened, however, he did not have to sleep out, for he obtained leave to pass the night in the office of the Gold Indicator Company. This proved to be another piece of good fortune. He spent some days at the Gold Indicator Company, and while he was there a delicate piece of machinery went wrong which only Edison was able to put right. This so impressed a Dr. Laws, the inventor of the instrument, that he straightway offered Edison the post of managing engineer, an offer which was promptly accepted.

Thomas Edison was now twenty-two years old, and was definitely entering upon his life-work as an inventor. Soon after his arrival in New York he invented a printing telegraph for stock quotations which brought him in forty thousand dollars (£8000), and the story goes that Edison carried this his first big cheque around

with him for days, having no idea what to do with it. This money helped him to establish a laboratory and factory at Newark, New Jersey, where he engaged men to work under him, and between then and 1873, he devoted much of his time to improving the methods of sending messages by electricity, and in so doing invented quadruplex telegraphy. By this invention, which was bought by the Western Union Company, one wire did the work of four by making it possible to send two messages simultaneously from each end of the line, and it is proof of how well Edison laboured that his method, with but slight alteration, is the one still in most general use to-day. During the same period he made improvements to the Remington typewriter.

Life was beginning to look up for the young inventor, who was now married, his bride being Mary Stillwell, and in 1876 he made his home at Menlo Park, and set up his laboratory there. His next great work was connected with the telephone. This was not Edison's invention, but the work of another man on which he improved. In 1876 an inventor named Dr. Graham Bell patented the first telephone, but the reception was very weak, and it was quite impossible to carry on an audible conversation over any considerable length of line. This was where Edison stepped in. Maybe he already had visions of men speaking together half across the world; at any rate, he invented an entirely new transmitter and made various other improvements, with the result that it became possible to use the telephone over great distances, and it soon became a necessary addition to every office and home.

Perhaps the best known of all Edison's inventions was produced the following year when he was thirty years old. This was the phonograph, the forerunner of all gramophones, and it was his own invention from start to finish. Edison was fond of keeping his ideas to himself, and the story is told how one day he asked two of his assistants to produce a new piece of apparatus on the lines of a drawing he gave them. It was a strange-looking contraption with a drum to which a handle was attached, a tube, and various other "gadgets" as we should now call them, and the workmen could not make head or tail of it. Still, the master had ordered it, so they made the machine, and in due course they brought the completed apparatus to Edison. Naturally, they were all curious to see what he was going to do next. What he did first was to wind a strip of tinfoil round the drum. He then proceeded to recite "Mary had a little lamb" into the tube while turning the drum by means of the handle, and if his assistants were present at this demonstration they must have had grave fears for their employer's sanity. But it was only another miracle Edison had invented, for when, after making certain adjustments, he started to rotate the drum again, Edison's voice came out of the tube, repeating word for word, as he had said them, the lines of the famous nursery rhyme.

The phonograph created a great sensation. Newspapers devoted long articles to the talking machine and the man who had invented it. Many people, indeed, refused to believe that the human voice could be reproduced mechanically, and pronounced the whole

thing a trick, some even going so far as to accuse Edison of being a ventriloquist, and saying that it was he and not the machine which repeated the words. These doubts were gradually removed, however, and the phonograph was accepted as a great invention. But now, after its sensational appearance, Edison lost interest in it for some years. He was always first and foremost an inventor of electrical devices, and in 1878 he began experiments in electric lighting, so that ten years elapsed before he returned to the phonograph and improved it in many ways. Better methods of producing records and more efficient needles were invented, and wax cylinders took the place of the old tinfoil. By this time, too, other inventors had followed in Edison's steps and the "gramophone" had been introduced.

There is no doubt that the most useful of Edison's work, so far as humanity is concerned, was that connected with electric light. Until he invented something better, arc lamps in which carbons were used were the only means of lighting by electricity. These arc lamps were unsuited for general household purposes. They were troublesome to keep in order, noisy, smelly, and trying to the eyes, so Edison turned his attention to inventing a lamp without these defects which could be used in an ordinary room. What he set out to produce was an incandescent electric lamp. Such a lamp had to consist of a thin carbonised wire or thread called the *filament* enclosed in a glass bulb. The interior of the bulb had to be a vacuum, that is to say, all air must have been withdrawn, and the filament had to be attached to platinum wires which passed through the glass by

air-tight channels, and which in turn could be connected with the source of electric supply. Given such a lamp, when the power was switched on, the filament would glow or become incandescent and so give forth light.

That is the lamp Edison had in mind, but it was one thing to know what was needed and another thing to turn his ideas into solid fact. Actually he spent over forty thousand dollars (£8000) on a multitude of experiments before he discovered the most suitable material from which to make the carbonised filament, and the first incandescent electric lamp was at last produced. This lamp burned for forty hours and was very far from perfect, and still more experiments were needed and a vast amount of research had to be undertaken before the problem was satisfactorily solved and a lamp created which could be put into general use.

Edison had produced his first electric lamp in 1879. Three years later the English Edison Company opened the first incandescent electric lighting station in the world on Holborn Viaduct in London. This station supplied power to over three thousand lamps in the surrounding district, and a similar power station was opened soon after in Pearl Street, New York. So the beginning was made, and to-day there is hardly a city in the world the inhabitants of which do not benefit from the result of Edison's labours.

Edison's less important inventions reached very large numbers. In 1880 alone he applied for no fewer than sixty patents, and kept a staff of a hundred men working for him at Menlo Park. So many and varied were his inventions, indeed, that he became known as the

Wizard of Menlo Park, and newspaper men were always looking in at the laboratory in the hope of picking up information about some fresh contrivance he had made. In this connection a story is told of a young journalist who called upon Edison one day and came away empty-handed. He was determined not to disappoint his paper's readers, however, so he decided to do a little inventing of his own and give Edison the credit. Accordingly the next morning his paper announced that the Wizard of Menlo Park had just perfected a "stratified shirt" which would do away for ever with the need for washing men's shirts, and give the fastidious wearer a clean garment every day. This stratified shirt was constructed of three hundred and sixty-five layers of thin material, and all the owner had to do each morning was to peel off the top layer to find himself with a shirt as good as new. One feels that the shirt would have been rather thin when it had been reduced to the three hundred and sixty-fifth layer, but despite the obvious "tallness" of the story, so great was Edison's prestige as an inventor that a great many people believed it.

Many stories are told about Edison himself. One day he handed an electric light bulb to an assistant, and asked him to let him know the cubic capacity of the bulb. Three days later he asked for the answer, and was informed by his assistant that he had not yet come to the end of his calculations. Thereupon Edison took the bulb, filled it with water, and then, pouring the water into a measuring-glass, announced that the cubic content was so-and-so. That assistant must have felt very small!

Edison's first wife died in 1884, and in 1886 he married again, this time a Miss Mina Miller. Edison's married life was very happy. He was a good man to live with, upright and true, and at the same time he was a prodigious worker. Yet he never set out to achieve fame. Quiet and retiring by nature, it was the task which counted with him and not men's praise, and the fantastic and wonderful stories about his work, which sometimes appeared in the newspapers, almost always called forth from him a prompt denial.

Meanwhile, his thoughts had been directed towards producing a machine or machines whereby a moving picture might be presented to the beholder's eyes by the passing of a number of smaller pictures—each one slightly different from the others—before his line of vision at a pace which would blend them into one and so present the appearance of movement. The idea was not new. Many simple devices had been made which were able to create the impression of motion, but now, with the introduction of the Eastman Kodak film and the instantaneous camera, a new prospect for fresh advance was opened up of which Edison quickly took advantage. His first invention was a camera called the Edison Kinetograph, which recorded the tiny pictures on strips of film fifty feet long by half an inch wide. This appeared in 1889 and was followed in October of the same year by the Edison Kinetoscope, in which the pictures taken by the camera could be viewed. This machine did not throw the pictures on to a screen as is done nowadays, but it was fitted with a peephole and a powerful magnifying lens behind which the film was

made to pass rapidly by turning a handle. The pictures were viewed by transmitted light and only one person could look through the peephole at a time.

Edison's Kinetoscope was first sold to the public in April, 1894, and the machines were soon on sale all over the world. From them arose the demand for a projector which would throw the pictures on to a screen so that many people could view them together. Edison did not share in this development, which led to the combination of the Kinetoscope and the magic lantern, and so finally to the modern film projector, but he never lost interest in the cinema, and in 1913 he displayed the first talking picture in which the moving pictures and the phonograph were made to keep time together.

This grand old man of science was now seventy-four years old, but his capacity for work was hardly impaired. From 1915 to 1918 he perfected many devices which were helpful to the American navy when the United States entered the first Great War in April, 1917. Among these inventions was one for detecting the presence of enemy submarines by sound, a new searchlight, plant for manufacturing chemicals used in warfare, and various types of gun projectiles.

Few men, indeed, have worked harder or done more in a lifetime than Edison. He laboured right up to the end with amazing vigour for so old a man. Among his final experiments were some designed to produce synthetic rubber, a commodity of enormous value to the world. In 1929 his health showed the first signs of failing, but it was not until August 1, 1931, that this amazing man passed away in his eighty-fifth year. He

was mourned by many, but though the man has left us, the results of his labours will be reflected in the life of the world perhaps for centuries to come, a truly fitting monument for one who all his days loved honest work and scorned idleness and sloth.

SAMUEL PIERPONT LANGLEY

1834-1906

WILBUR AND ORVILLE WRIGHT

1867-1912. 1871-

Leonardo da Vinci, the great Italian painter, sculptor, scientist, architect, musician and engineer, who lived in the latter half of the fifteenth century, was the first man to study heavier-than-air flight, but it was an American, born four hundred years later, who built the first heavier-than-air machine that actually flew. His name was Samuel Pierpont Langley.

Langley was born at Roxbury, Boston, Massachusetts, on August 22, 1834, and there, when the time came, he was trained to be a civil engineer and architect. Neither of these professions appealed to him particularly, however. His mind was set on more ambitious things, and often on a starry night this young man would look up at the sky and ponder on the mysteries of space. He already knew a good deal about the stars and the other heavenly bodies, but he wanted to know much more. He wanted to study them, to add something to the tale of human knowledge of things beyond this small world, and so his mind became set on being an astronomer. But there were difficulties in the way. He was not a rich man, and he had his living to earn, so that he was thirty before he had saved up enough money to make a long-projected trip to Europe. There he wandered about visiting the great observatories and

learning how things were done in the Old World, and on his return to America he obtained the position of assistant in Harvard College Observatory. The salary was small, but Langley was doing what he wished to do. He was fortunate, too, in being a clever mathematician, and before long he improved his circumstances by securing the post of assistant professor of mathematics in the United States Naval Academy at Annapolis, Maryland.

This was in 1866, and when in the following year the directorship of the Allegheny Observatory at Pittsburg became vacant and Langley was appointed, it must have seemed that he had reached the height of his ambition. He retained this post for twenty years, and while there he studied the invisible infra-red rays given forth by the sun. These are the heat-rays. Nowadays they are used in the treatment of rheumatism and similar ailments, and you can buy a lamp giving forth these healing rays, but in Langley's time comparatively little was known about them, and to help him in his researches he invented the bolometer. This is an instrument for measuring heat, and it is of such incredible delicacy and precision that it can record changes of temperature as minute as one-hundred-millionth of a degree Centigrade. Armed with this instrument Langley stationed himself in an observation post 12,000 feet above sea-level on Mount Whitney, and there discovered a great number of these mysterious, unseen rays which were hitherto unknown, and so added immensely to our knowledge of them.

But it is as the inventor of the first heavier-than-air

machine to fly that Langley is more widely known than for his researches into the infra-red rays, though fame for his invention did not come to him until eight years after his death. At the Allegheny Observatory, along with his astronomical work, he had conducted a series of experiments into the principles of flight, and when in 1887 he was appointed secretary to the great scientific Smithsonian Institution at Washington, he found himself with ample leisure to devote to his new task.

The flight of birds had always fascinated Langley. Thousands of times he had watched all manner of birds flying and gliding through the air, and had pondered on the miracle of their support in so thin and invisible a medium. Birds were heavier than air, and if they ceased to move they dropped to earth like a stone, so it followed that only by continual motion were they able to keep themselves aloft. That much Langley knew, but such knowledge only whetted his appetite for more. Would it be possible for man to fit himself with an equivalent of the wings of birds, and having done so, could he supply motive force sufficiently powerful to propel him and his machine through the air at a speed which would keep him from falling back to earth?

Most men who thought along similar lines answered the question with an emphatic "No!" declaring that an engine capable of supplying such power would be so heavy that it would anchor the aircraft to the ground. But Langley was not so sure. He thought that a light but very fast engine would provide the necessary speed where a more powerful but slower and heavier engine would fail, and he set out to prove his contention. He

did not start straight away on a full-sized, man-carrying machine. His first attempts were with model machines, and after he had constructed several and had experimented with different motive agents such as steam, compressed air and carbonic acid gas, he at last produced an "aerodrome", as Langley named his invention, which satisfied him. It weighed thirty pounds, measured sixteen feet in length, and had a wing-span of thirteen feet. The motive power was supplied by a small steam engine of one horse-power which carried enough fuel and water to keep the machine in the air for about one and a half minutes.

Such was the first practical heavier-than-air flying machine. There was still the difficulty of launching it into the air at flying speed to be solved, and finally Langley constructed a catapult on the roof of his houseboat on the River Potomac, from which it could be shot into the air. It was hoped, too, that if the river were used as the scene of the trials the machine would escape serious injury when it fell.

At last came the great day when the invention was to be put to the test. It was May 6, 1896, Langley was in his sixty-second year, and we can imagine the anxiety with which he awaited the result of the trial. Besides himself and his mechanics there was only one other person present, his friend Dr. Graham Bell, the man who was mentioned in the chapter on Edison as the inventor of the telephone. Afterwards Bell wrote a description of the momentous event, and this is how he describes the first flight ever made by a heavier-than-air flying machine:

"I went out into the middle of the bay in a boat where I might get a near view of the apparatus, and provided myself with a camera in case I should have an opportunity for a snapshot at the machine in the air. Langley was too nervous to be close at hand, and retreated to the shore; and in my mind's eye I can see him now, a lonely figure against the dark background of the woods, watching from a distance the results of the experiment.

"Then came the whirl of the propellers, the catapult was released, and the machine shot off horizontally into the air. This was a very critical moment. Would the machine fall into the water? Would it fly against the trees that surrounded the bay, or would it clear the trees and make an extended flight?

"These questions were soon answered by the machine itself, which gradually rose into the air and made a beautiful steady flight, far above the trees, continuing to climb higher and higher as it went along, until at last the steam was exhausted, and the propellers stopped.

"Then came another critical moment. Would the machine plunge into the water with a crash? But no, it glided gracefully down and alighted on the water, none the worse for its trip except for a wetting. After the wings had been dried the machine was tried again with the same success. The workmen hailed Dr. Langley on the shore with loud cheers. This was his moment of triumph. After many years of study and experiment he had at last seen with his own eyes a steam-engine flying with wings in the air like a bird."

Such is an eye-witness's account of Langley's triumph. The "aerodrome" had only flown half a mile, but it had proved beyond all doubt that heavier-than-air flight was possible, and had foreshadowed the great aerial fleets which would one day fill the skies. Later in the year a second model machine attained a speed of thirty miles an hour over a course three-quarters of a mile long.

Langley now began the construction of a larger machine on similar lines which would carry a man. The American government granted him some financial assistance, and by October, 1903, his man-carrying "aerodrome" was completed. Trials were conducted on the Potomac River, and according to some accounts they were spoiled on two occasions by accidents to the launching gear. Others say that the machine and its pilot were catapulted into the air from the roof of the houseboat, as the smaller model had been, but that owing to a piece of the catapult breaking at a critical moment, the "aerodrome" and its pilot fell into the river instead of climbing up into the air. In either case the "aerodrome" was a failure at the time, and his non-success, and the ridicule with which his attempts were hailed by certain sections of the press, so affected Langley, who was now nearly seventy, that he gave up all further experiments.

He thought he had failed, this man who had worked so hard to give men wings, and so did the scoffers; yet though no one knew it at the time, they were wrong, for despite the dismal ending to his crowning experiment, Langley had been successful in constructing a heavier-than-air flying machine which would carry a

man. After its failure to fly, Langley's "aerodrome" was given a home by the Smithsonian Institute of which he had been secretary, and there for eleven years it remained an exhibit for the curious to stare at. Then, in 1914, interest was reawakened in the "aerodrome". It was taken out, fitted with floats and a 50 horse-power petrol engine. The machine was then launched on Lake Keuka, the engine was started, and in sight of all beholders the "aerodrome" rose gracefully into the air and flew.

But Langley was not there to witness his vindication. He had passed away in February, 1906, a sad old man burdened with the sense of failure, and it was not until he had been dead eight years that humanity awoke to the debt they owed him, and recognised in him the father of modern flight.

Langley was not, of course, the only man of his time who was interested in heavier-than-air flight. Though the vast majority of people either scoffed at the idea or took no interest in it whatever, there were an enthusiastic few who were struggling hard to solve the problem, and to whom Langley's success in 1896 was like a beacon in a dark land. Among these were the brothers Wilbur and Orville Wright.

Wilbur was born near Millville, Indiana, on April 16, 1867, and his brother at Dayton, Ohio, on August 18, 1871. Their ancestors had emigrated from England in the seventeenth century, and they were sons of Milton Wright, a bishop of a small religious sect known as the United Brethren in Christ. There was also a daughter,

named Catherine, who was to render no mean help to her brothers in the great cause.

Wilbur and Orville both received high-school educations, and were particularly bright and enterprising lads. Anything mechanical especially interested them, and as boys they owned a printing press and published a boys' paper and a number of weekly periodicals. In 1896, when Wilbur was twenty-nine and Orville twenty-five, they opened the Wright Cycle Company at Dayton. There was a cycling boom on in America at the time, and they manufactured and repaired bicycles, but already their interests had been awakened in the problems of flight. For some time they had been studying the work of Otto Lilienthal, a German, who had been experimenting in the use of gliders—flying machines without engines. In 1896 Lilienthal died, and in the same year Langley's model "aerodrome" proved that a heavier-than-air machine could fly. This event interested the Wright brothers tremendously, and they began to study the theory of flight, especially flight in gliders, until they had learned all that was so far known upon the subject.

But they were not satisfied. They realised that an immense amount was still to be learned about gliding, especially in the control of the gliders, without which every flight must be attended with considerable danger. Accordingly, in the summer of 1900, they closed their cycle business and went to Kitty Hawk, North Carolina, determined to build gliders of their own and solve, by personal experiments, the problems which still confronted them.

It was a bold thing to do. They had little money, and they were giving up a sure livelihood for a terrible uncertainty. But by this time the conquest of the air had become the dominating motive in their lives, and one which they could not resist. They had, moreover, two staunch supporters in their new undertaking, their father and their sister Catherine, who was now a school-teacher, and these two contributed every cent they could spare from their own scanty means to help the brothers in their task.

Wilbur and Orville set to work with enthusiasm. They had many disappointments, nevertheless progress was sure, and between 1900 and 1903 they built three gliders, each one an improvement on the last, in which they made hundreds of experimental glides, sometimes in winds as high as thirty-six miles an hour.

The result of all these trials was a biplane glider with a wing span of thirty-two feet. It had a front elevator and a vertical tail, and the machine was easy to control, and was altogether an immense advance on all previous gliders. The brothers were satisfied with their work. They had built a machine capable of control, their next problem was to provide that machine with power sufficient to drive it through the air and keep it aloft. All this was in 1903. In spite of the success which had attended Langley's model "aerodrome" in 1896, the brothers were firm in their conviction that no machine capable of sustained flight would ever be made which derived its power from a steam engine for which, in addition to its own weight, a heavy load of fuel and water had to be carried. What remained? The internal-

combustion engine, in which petrol was the fuel, ~~was at~~ at this time being used more and more to drive machinery and in motor-cars, and with this type of engine the brothers now began experimenting. No one had thought of using the internal-combustion engine as motive power for flying machines before the Wrights, but now the brothers built a 12 horse-power, water-cooled, four-cylinder engine weighing 240 lb. and mounted it on their machine. Behind the main planes they fitted two propellers, driven by chains in much the same manner as a pedal cycle is propelled, and at last everything was finished and the machine was ready for the trial flight.

December 17, 1903, was a memorable day. So careful had the Wrights been in conducting their experiments that they were quite certain the trial was going to be a success, and they confidently issued invitations to everyone living in the district to come and witness man's first flight in a heavier-than-air machine. The day turned out to be bitterly cold, and this may have kept onlookers away. The fact remains, however, that so apathetic was the general attitude towards flight that only five people—four men and a boy of sixteen—arrived in response to the invitation to witness an event which was to prove one of the most epoch-making in the history of the world. And among those five there was not one newspaper reporter.

With so little pomp do the most vital events occur. The machine was brought out, and Orville climbed on board and took the controls. It was half-past ten in the morning, and what followed may best be told in Orville Wright's own words.

“ Wilbur ran at the side, holding the wing to balance it (the machine) on the track. The machine, facing a 27-mile wind, started very slowly. The course of the flight up and down was exceedingly erratic. The control of the front rudder was difficult. As a result, the machine would rise suddenly and then as suddenly drop for the ground. A sudden dart when a little over 120 feet from the point at which it rose in the air ended the flight.”

Such is Orville's brief account of an historic event. By no stretch of the imagination could it be called a great flight, for the machine was only in the air twelve seconds; yet it had proved for all time that what had been claimed to be impossible was possible. A heavier-than-air machine carrying a man had flown.

That day Wilbur and Orville both made two flights, four in all. The fourth flight was the longest. In it Wilbur remained aloft for fifty-nine seconds, flying in that time a distance of 852 feet. That was the end of the first day's flying, and also the end, as a serviceable flying machine, of the first aeroplane. For while the two triumphant aviators and the five excited onlookers were talking together, discussing the wonder which had been performed that day, a gust of wind overturned the aeroplane, and damaged it so badly that it was never flown again.

Five people had witnessed the first flight, and in the months which followed it is doubtful if many more believed the stories which gradually leaked out that two men named Wilbur and Orville Wright had actually flown in a heavier-than-air flying machine. The scoffers



ON AUGUST 8, 1908, WILBUR WRIGHT FLEW A MILE
AND A QUARTER AT LE MANS

pioneers of heavier-than-air flight, it was with regret that he saw the great gift he had helped to bestow upon the human race turned to such evil and frightful ends.

LUTHER BURBANK

1849-1926

This is the story of a man totally unlike the other famous personages in this book. So far our heroes have been great soldiers, politicians, inventors, travellers or poets, but Luther Burbank was none of these. He was, as a matter of fact, nothing more exciting than a gardener. But what a gardener! In all the history of the world there has never been another gardener like Luther Burbank, who was so amazingly clever in his chosen profession that people called him "the plant wizard."

Luther was the thirteenth child of his parents, and was born at Lancaster, Massachusetts, on March 7, 1849. His father was an employee in a machine-making factory, and after Luther had received a good education at the local schools, he entered the same factory to train as an engineer. The boy was quite good at his work. He had inherited his father's mechanical skill, but from his mother, who came from farming stock, he also inherited a love of the land and growing things.

So young Luther was pulled two ways. At the factory he proved himself a good workman, but all his spare time was spent in the garden or in the vinery of an uncle who was a grape grower. Then, when he was eighteen, something happened which was to decide the course of his life. This was the publication of Darwin's book, *The Variation of Animals and Plants under Domestication*.

Luther read it through from beginning to end, and thenceforward became a devoted disciple of the author, while, spurred on by all he had read and learned, he continued his agricultural pursuits with still greater energy. Before long he began to feel the need for more land, and when he was twenty-one he bought seventeen acres at Lunenburg, and there began serious experiments for the improvement of plants.

His first outstanding success was with a potato. As a rule seeds are not found on potato plants, but one day, as young Burbank wandered among his crops, he noticed a plant which had a small cluster of seeds growing upon it. Burbank collected these seeds—there were twenty-three all told—planted them, and in due course twenty-three new potato plants appeared. One might naturally have expected the potatoes from these plants to be of the same kind; imagine Luther's surprise therefore when he found that they were all different, and that one plant especially yielded tubers of a size and whiteness far excelling any of the others. Discarding the remaining twenty-two plants, the young horticulturist carefully stored away the tubers of the twenty-third, and when the next season came round he planted them, and in time produced a small crop of potatoes in which all the fine qualities of the seedlings were faithfully preserved.

Burbank was elated. He realised that he had produced a new potato, and he sold the crop to a firm of seedsmen for £30, or about one hundred and fifty dollars in American currency. No doubt this seemed a large sum to young Burbank at the time, but it becomes

insignificant when one reads that in the following years the sales of the Burbank potato are estimated to have reached a total of £5,000,000 (twenty-five million dollars) in the United States alone.

Luther Burbank, however, never set great store on riches. His work was the thing which mattered, and at that moment one hundred and fifty dollars was a god-send, for it enabled him to leave Massachusetts and travel right across America to California where, in the sunny, genial climate, he hoped to devote his whole time to horticulture. At Santa Rosa he bought four acres of land and set to work, but at first his little nursery did not yield enough to support him, and for a while he had to increase the slender returns by taking on odd jobs as a carpenter. Hard work, however, brought its reward. The time came when his nursery began to yield a substantial profit, and he was able to give up his work as a carpenter and spend all his time on his plantation. Soon he found it possible to increase his holding with additional acres, and now with his nursery and experimental farm firmly established, he embarked on the career which was to yield so many wonders and carry him to the topmost pinnacle of his profession.

Burbank worked his wonders by selection, grafting, and artificial pollination. By this last method the pollen from the stamens or male parts of one plant was transferred to the carpels or female parts of another plant. The female plant thus became fertilised, and by this means Burbank mixed the qualities of one selected plant with those of another selected plant so that the

species was improved. Thus a plum small in size but of good flavour might be "crossed" with a much larger plum which was of inferior taste, and the fruit resulting from this combination possessed the good qualities of both parents—that is to say, it would be both large in size and excellent in flavour.

By these methods almost any kind of fruit or flower can be produced, as was shown by the amazing results of Burbank's experiments in plant breeding. The magnitude of his work, indeed, is proved by the fact that when later in life he came to set down his methods, observations and discoveries in book form it took twenty volumes to contain all he had to tell.

Naturally, everything that Burbank grew was not a success. He would raise thousands of seedlings all of one species of plant, and from them he would select perhaps fifty as worthy to be used for further experiments, while the remainder were destroyed. It seems a terrible waste, but only by these wholesale methods could the best results be obtained. At one time, in addition to many thousands of other plants, Burbank had growing in his nursery 1000 grape vines, 2000 pears, 2000 cherries, 4000 apples, 5000 chestnuts, 5000 walnuts, 6000 almonds, 60,000 nectarine and peach trees, and no fewer than 300,000 different kinds of plum.

Just as one man may be a born painter, and another a born writer, so Burbank was a born horticulturist. His senses of taste and smell were developed to an extent far beyond those of the average man or woman, and so keen and delicate was his sight that he could detect minute shades and variations in colour quite beyond the

power of recognition by ordinary eyes. These gifts were of immense value to him in his work, and we are told that he would walk round a bed containing thousands of seedlings, and that when he reached the end he would be able to point out the few plants which were to be saved for further cultivation, while the remainder were destroyed.

Some of Burbank's productions are to-day in general use, others, even more wonderful, are less widely known. The loganberry, now grown all over the world, was created in Burbank's nursery by crossing a raspberry with a blackberry. By crossing the plum and the apricot he produced a new fruit which he called the plumcot. He created white blackberries, pipless oranges, stoneless plums, while a still more remarkable achievement was a peach which had an almond inside in place of a stone.

Such triumphs were not, of course, produced in a day. Often thousands of experiments, lasting over several years, were needed before success crowned Burbank's efforts. An example of this was the sunberry. To produce this delicious fruit he crossed two species of nightshade, one African, the other American, neither of which bore anything at all edible. It does not take long to set it down in words, but it took Burbank twenty-five years of continual effort, in which he destroyed thousands of failures, before one day success appeared in the shape of a single plant on which a solitary berry was growing. That berry was worth many times its weight in gold, for it was the forerunner of all sunberries, and Burbank watched over it as a mother

watches over her child. As soon as the berry ripened he gathered the seeds, and when in due time these were sown and grew into plants it was found that they all bore delicious, edible fruit. The sunberry had arrived.

No more fitting name than "the plant wizard" could have been given to Luther Burbank, for really it seemed that he could do anything he chose. Because it is difficult to gather chestnuts off the tall chestnut trees, he created a dwarf variety of tree no taller than a small bush. Walnut shells are notably hard to crack, so he produced a type of tree the fruit of which was covered with shells so thin that they could be peeled off with the fingers. But this time Burbank had been too clever, for the birds discovered the thin shells, and feasted on the fruit to such an extent that he had to make the shells thicker again to protect the nuts from the birds.

One of Burbank's most spectacular achievements was a plant on which both potatoes and tomatoes grew above ground from the same stalk, while by grafting tomato and potato plants, he created a plant which combined the virtues of both and produced tomatoes above ground and potatoes below. What Burbank did by grafting was indeed sometimes almost miraculous. On one occasion he presented Stanford University, at which he had become a lecturer on evolution, with an apple tree bearing seventy-three distinct grafts. Moreover, each graft produced true to type, so that anyone wanting an apple had only to go to the tree and he had seventy-three different varieties to choose from.

Burbank did not devote all his time to fruit and vegetables. He enriched the scent of many flowers, worked

wonders in the colour and size of the poppy, and during the course of his lifetime produced no fewer than 250,000 lilies, each one differing from the others in form or colour.

Greatest of all Burbank's achievements were those by which he strove to convert the waterless, desert places of America into pastures capable of supporting large herds of cattle. By crossing different varieties of grasses he produced one which would grow with the minimum of moisture, but his most important contribution in this direction was the creation of a prickleless prickly pear. The prickly pear is a cactus, one of those strange plants which have adapted themselves to life in waterless places where no other green things can grow. This it has done by thickening its stems, while its leaves have shrunk until they are hardly more than prickles, with the result that they present the smallest possible surface to the scorching rays of the sun, and the plant is therefore able to retain within itself a great part of the moisture it collects, which would otherwise be evaporated by the heat.

The prickly pear thus contains a large quantity of water despite the arid regions in which it lives, and would be an invaluable food for cattle were it not for those leaf-prickles which stick out in all directions like bayonets. Burbank realised this, and accordingly he set to work to produce a prickly pear which, while retaining all the qualities which made it such a valuable food, would be free from those bayonet-like prickles. Thereupon followed ten years of ceaseless experiment. His first step was to pick out a number of plants the

prickles of which were shorter and more widely spaced than was usual, and from these he bred other plants, choosing from each generation of plants those with the fewest and shortest prickles. He reared thousands of plants in this way, and as the years passed the prickles became less and less pronounced, but still they were prickles, and while they remained the plant was unfit for food. Nevertheless, Burbank persevered. Patience is the most necessary virtue in a plant-breeder, and he possessed it to a marked degree, and so at length he had his reward. One day he was walking round his nursery inspecting his plants, when he saw a prickly pear which appeared to be free from prickles. He went closer and examined it, and as he did so he realised that success had come at last. It was a fine plant with the fleshy, moisture-laden stems which made it such an excellent food well developed, but unlike the scores of other plants around him, it had not a single prickle upon all of its broad, green surface.

Burbank had reared a prickly pear without prickles, but would it breed true or would it revert to type? It did not. When other plants were reared from this parent plant they also were free from the bayonet-like spines, and to-day the descendants of that first prickleless prickly pear have multiplied beyond counting, and where once there was nothing but sandy desert, herds of cattle now exist upon the products of Luther Burbank's patient toil.

This mild-mannered, modest horticulturist, who worked such wonders, was a very great man in his particular sphere. His fame reached out far beyond



BURBANK REALISED THAT SUCCESS HAD COME AT LAST

America, and men interested in plants and their growth came to California from all over the world on purpose to see him at work and study his methods. Once he sold Cecil Rhodes ten thousand apple trees to be planted in South Africa. But he was never a wealthy man. Riches as riches held no appeal for him, and when in 1904, at the age of fifty-five, the Carnegie Trustees granted him £2000 a year he accepted the gift gratefully, for it enabled him to carry on with the work he loved free from financial hindrances.

Few men have succeeded in persuading Nature to produce something entirely *new* from her vast storehouse, but Burbank was a true creator, and for many generations to come human beings will benefit from his labours. He died at Santa Rosa, where he had lived so long, on April 11, 1926. Those who wish to know more about this great man should read *Luther Burbank, His Life and Work*, by H. S. Williams. Or they can read Burbank's own books entitled, *Luther Burbank, His Methods and Discoveries*, in twelve volumes, and then a further eight entitled *How Plants are Trained to Work for Man*.

MARK TWAIN

1835-1910

It takes a long time for a young nation to create a style of literature which is distinctly its own. In the latter half of the eighteenth century and the early part of the nineteenth, the United States of America produced many famous writers. Among them were Washington Irving, Fenimore Cooper, Nathaniel Hawthorne, Emerson, and Longfellow, but these men, though Americans, wrote as Englishmen wrote. Their writings were English literature written by Americans, and it was not until Mark Twain appeared upon the scene that the United States had an author who was truly American, and who thought and wrote about things as the common, ordinary men and women of the New World saw and understood them.

Mark Twain was not his real name. It was a pen-name which he took later in life, and the man who was to set the English-speaking world laughing with his American humour was actually Samuel Langhorne Clemens, one of the large family of John and Jane Clemens. Samuel was born on November 30, 1835, in the tiny frontier village of Florida, Monroe County, Missouri. There was nothing distinguished about the family. They lived in a log hut, and though John Clemens might be called a pioneer, he lacked the grit and perseverance to make a success of the life. By nature he was an amiable, shiftless man, for ever dreaming of a

golden future and waiting for something good to turn up which never did. Certain it is that young Sam owed little to his father, and when, in the boy's fourth year, a move was made to the small town of Hannibal on the Mississippi, the affairs of the Clemens family were not much improved. John Clemens opened a shop and was elected a justice of the peace, but poverty was always a near neighbour, and the father's death, when Sam was twelve, made it a permanent resident in the Clemens's home.

Nevertheless, Sam's childhood was not unhappy. He attended school and learned to read and write, and to do simple arithmetic, together with a smattering of history and geography, but his education could not be called a good one. Every year, too, he went to stay with an uncle and aunt and cousins who had a farm near Florida, and these visits to the frontier farm left golden memories which remained with Sam all his life.

But it was the Mississippi, that great river which with its tributaries forms a watery highway through vast territories, which was the predominating factor in Sam's childhood as it was in the lives of all the people who lived in the Middle-West. In those days there were no fine roads, no railways to carry the manufactures of the towns and the produce of the farmers from one part of the country to the other. The Mississippi was the highroad along which all such traffic flowed, and up, and down it there plied the Mississippi steamboats, with their huge paddle-wheels, joining the distant mysterious lands of the North with the city of New Orleans and the Gulf of Mexico 1500 miles away. The

visits of these magnificent ships—some of them the famous “show-boats” or floating theatres—were great events in the lives of the people inhabiting the isolated townships along the mighty river. The whole population would turn out to welcome them and see them off, and no one was more thrilled than Sam. They stirred his childish imagination as nothing else, and it became his great ambition to sail in one of those fine vessels which at night blazed with light across the dark, heaving waters, and to become one of that select band, the Mississippi pilots. Then John Clemens died, and Sam discovered that his childhood had died also, and that in future he must work for his living.

Accordingly Sam became a printer's apprentice, not because he wished to be a printer, but because an elder brother, Orion Clemens, had adopted that trade, and it seemed the natural thing to do. The year was 1847, and Sam was twelve years old. It was dreary work. At first all he received was board and clothes for his labours; then, in 1850, he went to help his brother Orion. Between them they produced the *Hannibal Journal*, and it was while he was with Orion that Sam saw his first works appear in print. They were two short articles which came out in the *Philadelphia Saturday Evening Post*, but all Sam received for them was the empty honour of acceptance, and what they were about has never been discovered.

Sam remained with Orion till 1853, then he set off to see the world. As more than one famous American had done before him, he started out with almost empty pockets, earning his living as he went by working at

his trade, first in one city, then, as the spirit moved him, travelling on to another. In this way he visited St. Louis, New York, and Philadelphia, drinking in all the wonders he saw and spending much of his spare time in the free libraries where he read scores of books. In all Sam was away about two years, at the end of which time he returned to his brother's printing office in Keokuk, Missouri.

But he did not stay there long. The following year (1856) he was off again, this time to Cincinnati, Ohio, where for one more year he followed the printing trade; then the wander-spirit again became too strong to be denied. No doubt the river had something to do with it. Cincinnati is on the Ohio, a great tributary of the majestic Mississippi, and as he watched its waters rolling by on their long journey to the sea, Sam must have been reminded of his boyhood dreams. At any rate, he threw up his job, booked his passage on the river steamboat *Paul Jones*, and in due course came to New Orleans on the Gulf of Mexico.

What he had intended to do there no one seems quite to know, and even Sam must have been rather vague on the point. But as so often happens to those who have the courage to take a chance, Fortune stepped in at this point, and one day as Sam was wandering about the quays, gazing at the fine sailing ships and wishing he could book passage on one of them, he met Horace Bixby, one of the best-known Mississippi pilots of his time. Sam was thrilled at the meeting. Here was one of those godlike beings who controlled the wondrous steamboats which had filled his childish soul

with wonder and envy. The two got into conversation and became friendly. Sam must have mentioned his desire to become a pilot, for the upshot was that Bixby offered to train him to fill that enviable post in return for five hundred dollars (£100) payable by instalments out of his wages.

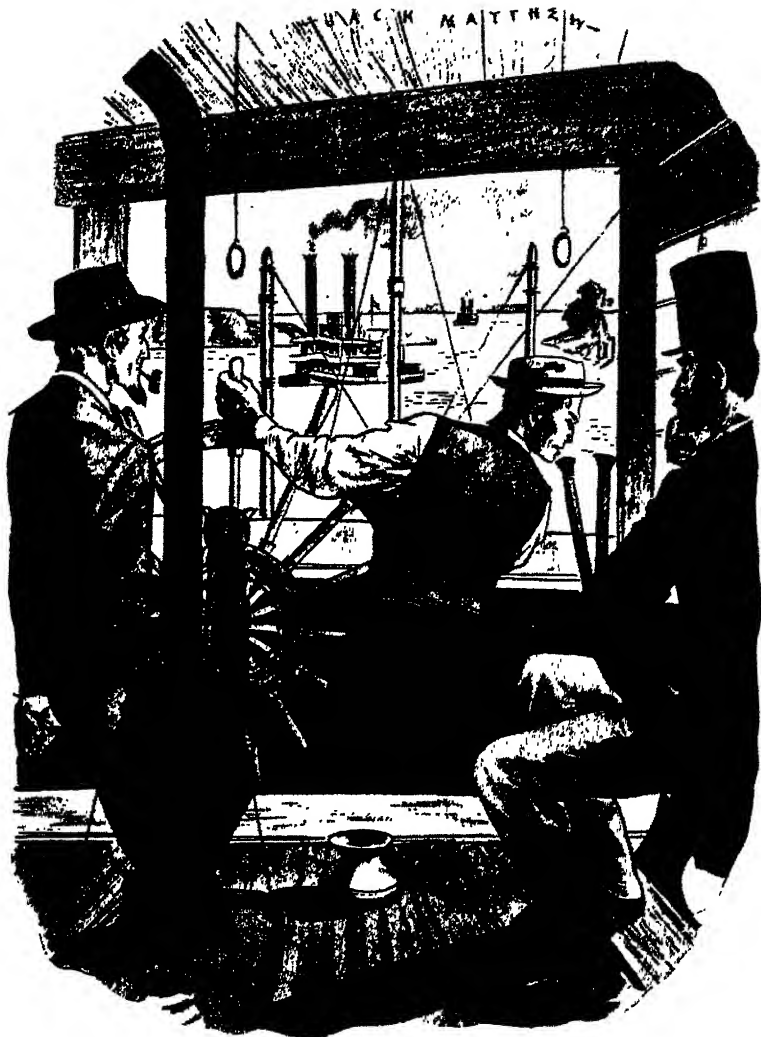
So Sam embarked upon his new career, and he soon discovered that there was a great deal to learn. Before he could become a Mississippi pilot he had to know by heart the twists and turns of every channel in thirteen hundred miles of river, the positions of every sandbank and rock. He must be able to pilot his craft with equal safety in darkness as in light, in times of drought as in times of flood, in fact, he had to know everything there was to know about the river, and—as an American would say—then some. It seemed an almost impossible task; nevertheless, so well did Bixby teach him, and so apt a pupil did Sam prove, that within eighteen months he had passed his tests and been granted his pilot's certificate.

It was from this period of his life as a Mississippi pilot that Sam Clemens adopted the name, Mark Twain, which he was to make so famous. Actually, it was not a real name at all, but was another way of saying "mark two" which, in the language of the Mississippi pilots, meant that the ship was moving in two fathoms of water. At the time when Sam became a pilot, "Mark Twain" was the pen-name used by a Captain Sellers, an old pilot who occasionally contributed short articles about the river to various New Orleans papers, and when a few years later the old man died, Sam adopted the pen-name for himself.

Sam Clemens's career in the proud position of a Mississippi pilot was not a long one. The Civil War of 1861 brought it to an abrupt end, but in his book, *Life on the Mississippi*, which he wrote more than twenty years later, he recalled his experiences of those great days and, as we shall see, the mighty river and all the memories attached thereto were to dominate much of his future work.

Sam took no part in the Civil War. His brother, Orion, had secured the post of secretary of the new State of Nevada, and Sam went West with him. In those days the West was the golden lure which drew adventurous spirits not only from the Eastern States but from all over the world. In 1849 the great Californian gold-rush had begun, and fortunes were still to be found along the creeks and in the gullies of the mountains, and it was towards this promised land that the brothers set out by stage coach on July 26, 1861, their destination being Carson City, Nevada, seventeen hundred miles away. It was a toilsome journey over rolling prairies, untamed mountains and dry, hot deserts, the homes of savage animals and uncivilised Red Men, but Sam enjoyed every moment of it, and stored up memories which he later reproduced in a book suitably entitled *Roughing It*.

As yet, however, Sam Clemens had shown no signs of literary genius. He was just a robust, healthy young man with an unruly head of auburn hair, twinkling blue eyes and a spirit of adventure. Soon after he reached Nevada the gold fever took hold of him, and he set out to make his fortune as a surface miner, digging and



WITHIN EIGHTEEN MONTHS SAM CLEMENS WAS A PILOT

washing for gold. The fortune in gold eluded him, but while he stood up to his knees in water, washing the gravel and sand for the precious metal, his agile mind collected little humorous incidents from the life around him, and these he included in small sketches which he sent to a newspaper called the *Territorial Enterprise*, published in Virginia City a hundred miles away. The articles were accepted; indeed, the editor, Joe Goodman, was so impressed with them that he wrote to Sam offering him twenty-five dollars (£5) a week if he would throw up his chance of a fortune and come and help him edit his newspaper. Sam accepted the offer, and either because he could not afford a conveyance or wanted to save money, he journeyed the whole distance between the diggings and his new job on foot.

This happened in 1862. Sam Clemens or Mark Twain as he was soon to become—he did not use the pen-name until February, 1863—was now twenty-six years old, and before long his writings were raising a laugh wherever the *Enterprise* was read. It was a merry life he led, and he was a favourite with the rough miners among whom he worked, for he wrote just the sort of humorous, local stuff they liked to read. His jokes no doubt were suited to his public, and almost anyone was a fit target for his pen, and in 1864 he offended one reader so much by some personal allusion that he had to fight a duel. No one was seriously hurt, but duels were forbidden in Virginia City, and Mark was compelled to beat a hurried retreat which landed him in San Francisco, two hundred miles away.

In San Francisco he secured a post on the staff of the

Call. There he had to do as he was told, to report on any matter the editor chose, a state of affairs so different from his free-and-easy writing for the *Enterprise* that he was soon hating his new job heartily. However, before long he was on the move again. Once more the police were on his trail, this time on account of an article he had written and sent to the *Enterprise* accusing the San Francisco municipal authorities of corruption. To escape their attentions he took refuge in the hills, where he spent the winter of 1864-65 among the mining camps, digging for gold in the daytime and in the evenings playing billiards and fraternising with the diggers in the gaudy camp saloons.

In 1865 he was back in San Francisco, his fault either forgotten or forgiven. He was now thirty years of age, and still quite unknown beyond his local circle of friends; nevertheless, editors were beginning to notice him, and when one, who ran a San Francisco paper, asked him to go to the Sandwich Islands as the paper's special correspondent, Mark Twain jumped at the job. Here was a task after his heart, combining adventure, new lands, and a free hand to write anything he liked about Hawaii and the other islands of this little-known group, then ruled by an independent native king, Kamehameha V. The trip took place between March and June, 1866, and Mark Twain's description of his explorations, of the island days and nights, and the strange things he had seen and done were written so vividly that they were read throughout California, where they created quite a stir. At last Mark Twain had begun to find himself, and when in October he was persuaded to give

a lecture on his travels, he held his audience convulsed with laughter for over an hour.

Mark Twain's sojourn in the West was now coming to an end. He had tasted the sweets of local renown, and this whetted his appetite for wider fame. Accordingly, having received a commission from the *Alta* newspaper to keep it regularly supplied with articles descriptive of his wanderings, he sailed from San Francisco on December 15, 1866, and arrived in New York on January 11, 1867. Mark Twain had at last set out on the march of conquest which was to lead to fame and fortune.

He was only in New York six months, during which time he paid flying visits to St. Louis to see his mother, and to Hannibal, the town of his childhood; then he was off on a voyage to the Mediterranean and the Holy Land in company with a band of sightseers on board the luxurious paddle-wheel steamboat, the *Quaker City*. He had persuaded the *Alta* to pay his passage, and he was also to receive twenty dollars (£4) for every article he sent describing the incidents of the voyage and what he saw and did in foreign lands. He also made arrangements to send similar contributions to the *Tribune* of New York, so that people both in the West and East would be able to read his articles, and having thus made everything secure at home, he started off on June 8, 1867, to see the world.

Mark Twain's companions were a very ordinary band of sightseers. There were clergymen and their families, school teachers eager to improve their minds, and others equally unexciting, but in his letters and his book,

Innocents Abroad, published in 1869, Mark Twain has immortalised this band of commonplace people by the magic way in which he describes their visits to Paris, the Pyramids and all the other sights and things he and they saw and did together.

The letters Mark Twain sent to the newspapers during this voyage achieved a tremendous public. Everybody read them, everybody chuckled over them, and when he stepped ashore in America again on November 19, 1867, he found himself famous. Fame, indeed, threatened to overwhelm him. Newspapers clamoured for his services, lecture tours were arranged for him—his first season of sixty lectures brought him in eight thousand dollars (about £1600)—and wherever he went he created pandemoniums of laughter and was received with mounting admiration by the public. He deserved it, too. At last the New World had produced a man whose humour was the sort the average man and woman could understand, and who spoke and wrote, not as an educated Englishman, but as a thorough-going, hundred-per-cent American.

Mark Twain thoroughly enjoyed his popularity, but there was another matter besides fame and making money which claimed his attention at this time. Mark had fallen in love. The lady of his affections was a Miss Olivia Langdon, the sister of young Charles Langdon, who had been one of the travellers on the *Quaker City*, and on February 2, 1870, the two were married. Two people could hardly have been more different than the bridegroom and his bride. Mark, with his red hair, his keen, twinkling eyes, his unconventional manners and

strong personality, was the direct opposite to his delicate, conventional and deeply religious fiancée, and Olivia's father must have had many qualms about consenting to the marriage. Mark Twain might be famous, but there was still much of the rough Westerner about him. Nevertheless, consent was given, and not only that but, on the day of the wedding, the bride's father presented the happy couple with a house, Number 472, Delaware Avenue, Buffalo, furnished and all ready for occupation. Sam Clemens, the humble son of the shiftless John, had disappeared for good, and in his place was Mark Twain, America's Number 1 laughter-maker, the great humorist who was soon to make his name as that country's most popular and famous writer. .

Fame as a writer had already begun to come his way, for *Innocents Abroad* had been published several weeks before his wedding, and the first five months showed a sale of over 30,000 copies. Mark Twain and his wife lived in Buffalo, where he edited the *Buffalo Express*, less than two years. On November 7, 1870, a baby son, Langdon Clemens, was born, but he was a weakly child, and passed away on June 2, 1872. Before then, however, in 1871, the family had moved to the old-world town of Hartford, where Mark finished his book *Roughing It*, describing his experiences in the Far West, in between lecturing, and there, on March 19, 1872, their first daughter, Olivia Susan, was born. In August Mark Twain paid his first visit to England. His fame had gone before him, and he was entertained royally wherever he went, but what pleased him most was the respect with which he was greeted by such men as

Charles Kingsley, the author of *Westward Ho!*, and Charles Reade who wrote *The Cloister and the Hearth*. These men were famous writers, and he was proud and happy to find himself treated as their equal. So it came about that Mark returned home in November more famous than ever, and sat down seriously to writing. Occasionally he lectured, but he was not fond of this kind of public speaking, though by this time he could demand six hundred and fifty dollars, or roughly £130, for a single lecture.

In 1873 *The Gilded Age* appeared, a novel of which he was only part author, and which was later on made into a successful play, and in the same year he built a house at Hartford with a fine billiard-room on the top floor. This was a result of his western days, for Mark Twain had learned his billiards in the saloons of the great mining camps, and the game remained his chief recreation all his life. May, 1873, found him again in England—this time accompanied by his wife—where his triumph was even greater than on his first visit, and he lectured with as great success as he did in America; then home again in January, 1874.

Before he visited England, and all through his stay, Mark Twain had been thinking about another book he was going to write, and immediately he reached home he set to work to finish it. It was a real labour of love. The hero was a boy named Tom Sawyer, whose home was by the Mississippi just as the writer's had been, and into the story Mark Twain brought all the adventures of his boyhood days, the spell of the majestic river, the forests, the great cave where he and his companions used to

play, and the glamour of the famous steamboats which had so fascinated his childish mind. *The Adventures of Tom Sawyer* appeared in 1876 and was an instant success. All America, soon all the English-speaking world, and presently all civilised nations were chuckling over the exploits and escapades of the hero and his friends, or reading excitedly of the dangers through which they passed. It is a grand book, and it confirmed Mark Twain's reputation as a writer, while the vivid descriptions of American life and scenery won for him a special place in the affections of his countrymen.

For the next seventeen years Mark Twain maintained his triumphant position with hardly a rival. He made great sums of money, and might have been a rich man had he been more cautious in his investments and less open-handed. In 1878 he and his family set out on a tour of Europe during which they visited Germany, Italy, France and England, and they did not return to America until September, 1879. It was during this trip that Mark Twain and a friend, Joe Twitchell, set off on a walking tour through Switzerland and Germany, and the fun and incidents of the tour, the people they met, and the mishaps which befell them supplied Mark with the material for that amusing and delightful book, *A Tramp Abroad* (1880), which won immense popularity and still brings a chuckle to the reader's lips. In the same year he published *The Prince and Pauper*, in which he tells the story of a common child who changes places with the son of a king. In this book the scene is laid in sixteenth-century England, and Mark Twain shows up the difference between the lives of the rich and the poor,

a matter on which he, who hated all injustice, always felt very strongly.

This was the happiest period of Mark Twain's life. In 1874 his second daughter, Clara, had been born, now, in July, 1880, a third, Jane (Jean) Lampton Clemens, arrived. About this time, too, Mark Twain made a trip down the Mississippi from St. Louis to New Orleans. The spell which the mighty river had thrown over his boyhood had never been forgotten, and the voyage on one of the steamboats revived the glories of his pilot days. He renewed many friendships, among them that with the old pilot, Horace Bixby, and he stayed a few days at Hannibal, where he met again the boys and girls, now grown into men and women, with whom he used to play. These old memories and new experiences were gathered into his book, *Life on the Mississippi* (1883), in which he tells of his life as a river pilot, and recalls the great days of the steamboats before the coming of the railways, when the Mississippi was the highway down which flowed all the traffic of the Middle-West.

What many people consider Mark Twain's finest book was published in 1884. It was called *The Adventures of Huckleberry Finn*. Again it is a story of the Mississippi. Tom Sawyer reappears, but the chief figure is his disreputable friend, the ragged waif, Huck Finn, who with his companion, an escaped Negro slave, named Jim, floats down the river on a raft, meeting many adventures on the way. Some are tragic, but most of them are downright, hearty fun, and all the while the reader is given glimpses of the life led by the frontier

people before the Civil War, and wonderful descriptions of Mississippi scenery written as only Mark Twain could write them.

In the same year as *Huckleberry Finn* appeared, Mark Twain entered the publishing business. Usually writers place their books in the hands of an independent publisher, and receive a share of the profits, called a royalty, for their work. This is much the best method, for the author is saved the cost and trouble of printing and selling his books. Mark Twain, however, could not realise this. He thought he was not getting enough for his work, so he decided to be his own publisher and receive all the profits and not merely a share. Of course there was another side to the question. If he took all the profits, he had to bear all the cost and the risk of a book proving a failure, and in the end he lost much more than he gained over the venture.

There was, however, one famous American who was to bless Mark Twain's decision, and the firm of Webster and Company which he founded. This was General Grant, the Northern hero of the Civil War. It has already been told how Grant suffered great financial loss towards the end of his life, and how, fearing that his wife and family might be left destitute after his death, he decided to write his autobiography, although he was already afflicted with an incurable illness. The first publishing firms he approached were not particularly enthusiastic, and were unwilling to risk much on the publication of such a book. Then Mark Twain, the virtual owner of Webster and Company, stepped into the breach. He was as enthusiastic over Grant's project

as the other publishers had been luke-warm. He told Grant that his book would be a great book, that it would sell not in tens but in hundreds of thousands, and to prove his faith in the General's ability, he paid him twenty-five thousand dollars (£5000) as an advance on royalties. This fine, generous action so encouraged the dying soldier that he set to work at once on his great task. He began by dictating the book; then, when towards the end his illness made this impossible, he wrote it down in pencil. Nor did he lack helpers. All through the long weeks of struggle Mark Twain was a regular visitor, urging him on and keeping alive Grant's faith in his work by his own faith, until on July 20, 1885, the final word of the *Personal Memoirs of General Grant* was written, and the dying man laid down his pencil for the last time. Three days later he was dead. He had accomplished his task, however, for the *Memoirs* were a triumphant success, and in due course Mrs. Grant received nearly half a million dollars (£100,000) in royalties.

Meanwhile, ever since his visits to England, Mark Twain had been pondering on a book about that country. Like the rest of his countrymen he thought America vastly superior to England. This was not because he lacked affection for the Old Country and its people, but the ideas which had been responsible for the War of Independence were still very much alive in the minds of all Americans. They saw in the English monarchy and aristocracy, the upholders of that hereditary power they disliked and against which they had rebelled. They thought an established Church all

wrong, in fact, there was a great deal about England to which Americans objected and against which Mark Twain in particular wanted to have a tilt.

The truth was that the average American and Mark Twain knew very little about England. They could not understand the Englishman's loyalty to the Crown and his love for old institutions made sacred by centuries of use. They only saw the outward forms and observances which they hated, so when Mark Twain wrote a book called *A Yankee at the Court of King Arthur* (1889) in which, in his robust, humorous way, he set out to tell England just what she was and put her in her place, it was hailed with roars of delighted laughter. The laugh was deserved, too. The story is that of a hard-boiled Yankee who gets knocked senseless, and wakes up to find himself in King Arthur's England. He, however, has not changed. He has brought with him his pistol and a wealth of nineteenth-century wisdom, including a knowledge of machinery, and with this to help him he makes himself master of King Arthur's realm. Read just for amusement it is tremendous fun, but there is more in the book than mere laughter. That Yankee is often Mark Twain's mouthpiece. What he says Mark Twain thought, and through him in comic terms he expresses his resentment and scorn for the inequalities and injustices which he saw in the social life of England, forgetting that there were blots just as glaring in the social life of his own country which was supposed to be the home of the equal and free.

In 1891 Mark Twain took his family on another European holiday in which they visited France, Ger-

many and Switzerland. The winter was spent in Berlin, where they went a great deal into society, but crowning honour of all, though probably he did not think so, was the invitation Mark Twain received to dine with the Kaiser William II. It was not a festive meal. The Emperor alone might broach a topic of conversation, general talk was barred, and Mark Twain afterwards related how he caused general dismay by daring to make a few original remarks. The party cannot have improved his opinion of kings, and a much happier meeting was that which took place at Nauheim the following summer when he was presented to the Prince of Wales, afterwards Edward VII. Prince Edward was as informal as the Kaiser had been aloof and conventional, and the two men chatted together like old friends.

Mark Twain returned to America in 1892 but he did not stay long, and between then and 1894 much of his time was spent in Europe. His life so far had been a singularly happy one. Success beyond his wildest dreams had come to the son of the shiftless John Clemens. He had a beautiful home, and a wife and three daughters whom he adored and who adored him. But unfortunately he was a bad business man. The large sums of money he earned—at one time his income amounted to about a hundred thousand dollars (£20,000) a year—were frittered away on bad investments. Webster and Company also swallowed up much money, so in spite of the immense sums brought in by his writings and lectures and the *Grant Memoirs*, more was paid out than came in. To such a state of affairs there is only one end unless it is checked in time. Mark Twain could not

check it, and so, in April, 1894, Webster and Company went bankrupt with a debt of one hundred thousand dollars, and the author, at the age of sixty, faced the world a ruined man.

He faced it courageously, and with the announcement that every cent owing should be paid. Now he learned the affection in which his countrymen held him, for if he had lost his affluence, their love still remained, as was proved by the letters of sympathy which flowed in from all directions. As soon as possible he rejoined his wife and family who were at Étretat in France, and there he finished the *Personal Recollections of Joan of Arc*, written as though by a man of her own time. This was a serious, historical book and Mark Twain thought it his best work and cherished it above all others, for though his fame and the wealth which had been his were based on his ability to make people laugh, he hated people to think of him as merely a funny man. Unfortunately the majority of his readers did not agree. To them Mark Twain was a great humorous writer and they expected him to amuse them, so *Joan of Arc*, though a fine, moving book, was not well received and did not bring a great reward to the author.

But money had to be made to pay the debt and keep his dear ones provided for, and the quickest way to make it was by lecturing. So a round-the-world lecture tour was planned. Beginning in America and Canada, he took ship for Australia in August, 1895. From there he went on to India and South Africa, and everywhere he was greeted with honour and entertained nobly by the highest in the land. Life was looking up again, affairs

were beginning to mend, at least so it must have appeared to Mark Twain when he landed in England in July, 1896, only to learn that his daughter Susie was ill and then of her death on August 18.

It was the cruellest blow fate had dealt Mark Twain so far, but he bore it bravely. Private sorrows must not interfere with the payment of the money he owed, so he went on doggedly with his book, *More Tramps Abroad*, in which he recorded the experiences of his world tour. It was published in America in 1897, but the author and his wife and daughter Jean remained in Europe, dividing their time between Switzerland, Vienna and England. Towards the end of their stay Jean was taken ill, and not until she was cured did she and her parents return to America in October, 1900. It was a triumphant homecoming, for by this time Mark Twain had paid his debt to the last dollar and was his own man again.

Mark Twain was now sixty-five years old, and his work as a lecturer and writer was almost done. But he seemed unable to settle down. He was always changing his place of residence, and towards the end of 1903 he took his wife to Italy for the sake of her health and they made their home in Florence. They lived there till June, 1904, and then, on the fifth of that month, Mrs. Clemens died leaving a gap in Mark Twain's life which nothing could ever fill.

Soon after this sad event Mark Twain returned to America. Jean and Clara were now all that were left of his family, and with them he lived, moving from place to place as he had done before. In 1907 he made

his last journey to England, and on June 26 he was awarded the honorary degree of Doctor of Literature by the University of Oxford. This was the crowning honour of his life which was now so near its end. In these latter years the island of Bermuda had a great attraction for Mark Twain, and he visited it several times. He went there in 1909, and returned home in December to spend Christmas with Jean—Clara had meanwhile married—only to meet fresh sorrow. This time it was Jean who left him, dying suddenly in the very midst of her Christmas preparations on Christmas Eve. Fate had dealt Mark Twain its final blow and life had little left for him.

Still he made one more trip to Bermuda in January, 1910, but in April he was brought back to Stormfield, the house where Jean had died. He also had returned home to enter upon his last long journey, and he passed away as the sun was setting on April 21, 1910. Clara, his sole surviving daughter, was by his side, and his last words to her were, "Good-bye. If we meet——"

ROBERT EDWIN PEARY

1856-1920

RICHARD EVELYN BYRD

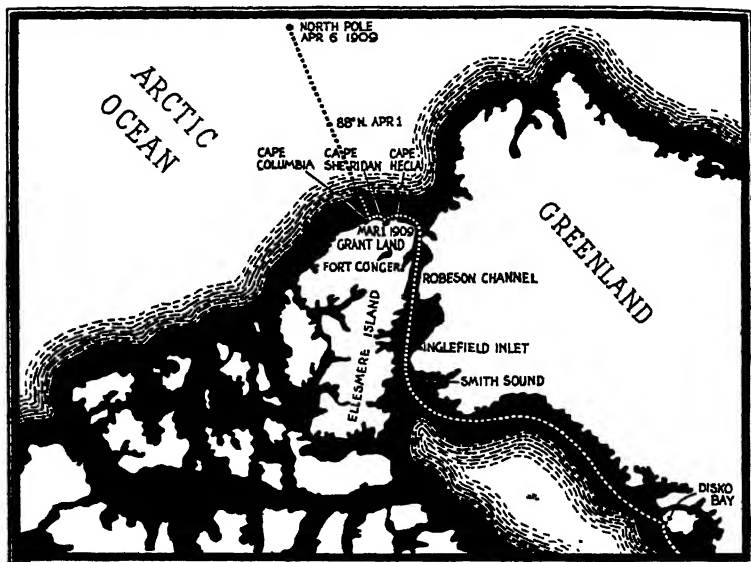
1888-

Robert Edwin Peary will always be remembered as the first man to reach the North Pole. This explorer, who was to succeed where so many had failed, was born at Cresson, Pennsylvania, on May 6, 1856. From school he went to Bowdoin College, from which he graduated in 1877, and four years later he entered the United States navy as a surveyor and engineer.

His first important appointment was in Nicaragua. This was in 1884. The possibility of cutting a canal through Nicaragua from the Caribbean Sea to the Pacific Ocean was then under consideration, and the business of Peary and his companions was to survey the country and to decide whether the project was possible or not. The surveys lasted till 1888, and finally the Nicaraguan site was abandoned for one in Panama. Meanwhile, in the summer of 1886, Peary had obtained leave of absence from his work, and had spent it in visiting Disko Bay on the west coast of Greenland.

The frozen North had already laid its spell upon him, and even while he laboured among the steaming forests of Nicaragua, Peary wondered how he could compel that forbidding but fascinating portion of the earth's surface to reveal its secrets to him. Accordingly,

on reaching Disko Bay, he set off inland to see what the country was like. It was almost entirely covered with snow and ice, but after travelling a hundred miles, Peary was convinced that he had discovered a possible route for further exploration, and returned to Nicaragua



well satisfied and with his mind full of plans for reaching the Pole.

From now on, indeed, the conquest of the North Pole became Peary's aim in life. In 1891, with the help of the Academy of Natural Sciences of Philadelphia, he went north again with a party of seven, among whom was Peary's wife, who thus became the first white woman ever to take part in a Polar expedition. This time Peary

and his companions travelled far north of Disko Bay until they reached Inglefield Inlet, where they set up their winter quarters. Even there, surrounded by everlasting ice and snow and perpetual night, they were not the only human beings, but had for neighbours a tribe of Eskimos. These were the Cape York Eskimos, who lived there all the year round, hunting the polar bears and seals for food, and bringing up their children in their igloos or ice huts, which possessed the distinction of being the most northerly human habitations in the world.

While at Inglefield Inlet the explorers made friends with these Eskimos and learned their habits and mode of living. With the coming of spring, Peary and Eivind Astrup, a young Norwegian, also made a long journey inland over the Greenland ice-cap. Their route took them along the northern coast to the north-east extremity and back, and the journey enabled Peary to prove that Greenland was an island.

After this the explorers returned home, but the next year another expedition was on its way. Again Mrs. Peary accompanied her husband, again they wintered at Inglefield Inlet, and while there Mrs. Peary gave birth to a daughter, the first white baby ever to be born in those frozen northlands. The bulk of the party went back to America the next summer, but Peary, with a coloured servant of his named Henson and a Mr. H. G. Lee, stayed behind with the intention of crossing the inland ice the following year. This they did, reaching the eastern coast of Greenland and returning to their base, a distance of over twelve hundred miles, without

mishap, and the autumn of 1895 found Peary home again once more.

So far no attempt had been made in these journeys to reach the North Pole, but now Peary began seriously to consider ways and means of accomplishing this feat. Unfortunately, he was a poor man, and had not the means to equip such an expedition himself. However, a Mr. Morris Jesup and the Peary Arctic Club, founded in the explorer's honour, came forward with promises of help, and in due course preparations were begun.

Meanwhile, Peary was writing his book *Northward Over the Great Ice*, in which he told the story of his expeditions up to 1895. This book was published in 1898, and in the same year he set off on the most ambitious expedition he had so far made. Lord Northcliffe, the British newspaper proprietor, had presented him with a ship, the *Windward*, commanded by Captain Robert Bartlett, and in her he sailed up the western coast of Greenland and explored Smith Sound and its surroundings with the object of discovering a route to the Pole.

Peary was a very strong man and possessed indomitable endurance and courage, and even when winter set in, he refused to stay shut up in winter quarters as had been the custom of earlier explorers, but made several long sledge journeys. His companions on these occasions were always Eskimos, whose friendship he had won and whose habits he had assimilated until he could at will become almost an Eskimo himself, eating what they ate, dressing as they dressed, and travelling as they travelled. In this we see the tremendous

thoroughness of the man. The Eskimos were the natives of those cold, inhospitable regions, they had learned the art of survival in that bitter climate; therefore, he argued, to get the best out of himself he must become as they were. And this he actually did.

On one of these expeditions during the first winter he set out from the ship on a day in December with four Eskimos and four teams of dogs drawing sledges on a two-hundred-mile journey to his first land-base. The thermometer showed a temperature of 50° below zero, but this proved no obstacle. Before long, however, the travellers encountered a terrible blizzard during which two of the Eskimos were overcome and lagged behind, and they would have died had not Peary turned back to find them. The two men were rescued, and eventually the party reached the land-base at Fort Conger where they took shelter in a small wooden shack. Meanwhile, both Peary's legs had been frozen to the knees, and finding it impossible to walk, he told his companions to lash him to a sledge and drag him back to the ship. This they did, but what Peary must have suffered during that terrible journey over the rough ice and through the cold and darkness of the Arctic night it is impossible to imagine. When at last they reached the ship he had to be carried on board.

This experience cost Peary eight of his toes, but as soon as possible he was about again, at first on crutches and then hobbling around on his maimed feet. Some men would have returned home after being so crippled, but not Peary. He taught himself to walk without his toes, and the next winter, that of 1899-1900, he spent

among the Etah Eskimos. Spring came and he set off north and having succeeded in reaching and passing the most northerly point of land, he pressed forward across the sea-ice until he reached $83^{\circ} 54' N.$ From there he turned back, and the two succeeding winters, his third and fourth in the Arctic, he spent at Fort Conger and Payer Harbour. Then, in the spring of 1902, he set off with his servant Henson and one Eskimo on a wonderful journey, the object of which was to reach the Pole or at least to penetrate as far north as possible. His route took him to Cape Hecla on the northern coast of Grant Land, and then due north over the frozen Arctic Sea. But conditions did not favour the explorers. The ice was broken and on the move, open water lanes and shifting floes made travelling slow and difficult, and at last, having reached a latitude of $84^{\circ} 17' N.$, Peary was forced to return.

Peary had now been over four years in the Arctic, and on arriving back in the United States, he found that he had been promoted to the rank of Commander in the navy. In recognition of his services as an explorer he was now elected President of the American Geographical Society, and in 1903 he visited Britain, where the Royal Scottish Geographical Society awarded him the Livingstone Gold Medal.

Back again in America, Peary began preparations for another expedition to the North Pole. This time there was sufficient money to build a special ship which was christened the *Roosevelt*, and in the summer of 1905, with Captain Bartlett again in command, Peary sailed up Smith Sound and through Robeson Channel to the

north coast of Grant Land where the vessel and her company went into winter quarters. There Peary waited until February, 1906, and then, on the twenty-first of the month, the dash to the Pole was begun.

As on earlier expeditions, the bulk of Peary's companions were his friends the Eskimos, and these he divided into separate parties, each commanded by a white man, and each one independent of the others so far as sledges, dogs and food were concerned. From the ship the explorers advanced to Cape Hecla, from which point they struck straight out across the sea-ice towards the Pole. But as in 1902, conditions were unfavourable. They met open water which held up the advance, while a general eastward drift of the floes over which they were travelling carried the travellers in the same direction, all the time they were struggling to make progress northward towards the Pole. To make matters worse, a gale sprang up which blew for six days, breaking up the ice still further, and destroying the depots of supplies the explorers had established along their route. Nevertheless, Peary struggled on until April 21, 1906, when, having reached $87^{\circ} 6' N.$, the most northerly point so far attained by a human being, he was reluctantly compelled to abandon the attempt. It was high time. Travelling was becoming more dangerous every day, and some of the gaps between the floes were covered with ice so thin that it bent as the explorers stepped upon it. Food was scarce, too, owing to the destruction of the food depots, and before they sighted Cape Neumayer on the north coast of Greenland, Peary and his companions had been forced to kill and eat some of their

dogs. Once on land, however, their worst sufferings were over. Game was found and shot, and the return journey to the ship was made without much difficulty, and by the middle of October the *Roosevelt* had brought the expedition safely home again.

There is something about the Arctic and Antarctic regions of the earth which calls a man back again and again once he has set foot upon their limitless expanses of ice and snow. So it has been with almost all great Polar explorers, so it was with Peary, and he was hardly back in the United States before he was planning another expedition to the North. Accordingly, as a first step, the *Roosevelt* was overhauled and given a thorough refit, and in the meantime Peary wrote the story of his last expedition and published it in 1907 under the title, *Nearest the Pole*.

Peary had hoped that he would be able to get away in the summer of 1907, but preparations were not complete, and it was not until July, 1908, that the *Roosevelt* left New York on the voyage which was to put the crown upon all Peary's previous endeavours. As on previous occasions Captain Bartlett was in command, and as the ship passed through northern waters, the Eskimos who were to form the body of the expedition were taken on board, and were conveyed with the rest of the party to Cape Sheridan, on the north coast of Grant Land, where it had been decided to spend the winter.

Peary was determined that this time he would reach the Pole if it were humanly possible. Nothing was to be left to chance, and during the winter all the necessary food, fuel and other articles were taken by sledge from

the ship to Cape Columbia, farther along the coast, in readiness for the spring journey.

Starting-time came on March 1, 1909, in the twilight of the Arctic dawn, for some days had yet to pass before the sun made its first appearance above the horizon after the long northern night. The party consisted of six white men and Peary's Negro servant Henson, seventeen Eskimos, and one hundred and thirty-three dogs drawing nineteen sledges. They were to proceed northward according to a definite plan which Peary had laid down for the journey. An advance party, was to lead the way one day's march ahead of the main body. Its duties were to choose the route, clear the trail where the ice was rough, and generally make things easy for their comrades behind. The main body again was divided into smaller parties, completely self-contained with their own sledges and equipment. Each party consisted of four men, and Peary's plan was that, as the advance proceeded, these smaller parties should break away at intervals and return to the ship, while those who remained should go forward with full loads until the time came for him to make his crowning effort to reach the Pole. To this end Peary was to husband his strength, leaving all hard work as far as possible to his companions, so that when he set out on the last lap he would do so with undiminished vigour.

Such was Peary's plan, the result of years of experience in the Arctic, and it worked well. This year, too, conditions were kind; the ice was well packed, no great gales arose to frustrate the explorers' efforts, and good progress was made. On March 5 the sun appeared

above the horizon for the first time, and two days later the first party, consisting of Dr. MacMillan and three Eskimos, set off on the return journey, taking with them three sledges empty except for enough provisions to last them back to the base. From now on matters went like clockwork. At the end of each march the advance party built snow huts in which they slept till the main body arrived, when they started forward again while their companions turned in to rest. At regular intervals the smaller parties turned back as arranged, leaving always the strongest and fittest to go on, until on April 1 Captain Bartlett was the only white man remaining with Peary.

The explorers had now reached 88° N., the highest latitude yet attained by man, and the time had come for Bartlett to return. So he said good-bye to his commander, wished him luck, and started back taking with him two Eskimos, eighteen dogs and one sledge, and leaving Peary with Henson and the four strongest Eskimos to make the last push. There was still 140 miles to go, but the travelling remained good. Four days passed, and the 6th of April, 1909, dawned. Peary took an observation, and as he finished his calculations he must have been a happy man, for they showed him that he had at last reached his journey's end, and that for the first time in history men stood upon the earth's northern Pole.

Peary hoisted the American flag and stayed there thirty hours taking several observations to make sure there was no mistake. No land was in sight. He and his companions were camped in the middle of a frozen



PEARY HOISTED THE AMERICAN FLAG

sea, and a sounding, taken through a crack in the ice to a depth of 1500 fathoms, failed to touch the bottom. Then came the return journey. This was made without mishap, and soon after reaching Cape Columbia on April 23, Peary and his companions were back on board the *Roosevelt*. On July 18 the ship left her winter quarters, and by September 5 the explorers were home again. Twenty-three years of work in the Arctic had been crowned with success.

Some time was to elapse, however, and Peary was to suffer a good deal of annoyance before he received his due reward. Another American explorer, Dr. Cook, arrived in Europe, asserting that he had reached the Pole a year earlier than Peary. Many people believed his story and gave him a great welcome, whereupon there followed a dispute over the claims of the rival explorers which caused a world-wide sensation. Who had reached the Pole first? Experts examined the scientific evidence produced by the two men, and in the end Dr. Cook's was proved to be unsatisfactory, and Peary was acclaimed the true discoverer.

Peary's own account of his last expedition may be read in *The North Pole*, published in 1910. The following year, in recognition of his services in Arctic exploration, he was promoted to the rank of rear-admiral and received the thanks of Congress. In his latter years Peary took a great interest in aviation. He passed away in Washington, District of Columbia, on February 20, 1920.

If Peary was the first man to reach the North Pole on foot, Richard Evelyn Byrd was the first man to fly

over both the North and the South Poles in an aeroplane. Byrd was born at Winchester, Virginia, on October 24, 1888. He went to school at the Shenandoah Valley Academy, but he did not remain there long, and early gave evidence of his adventurous nature by setting off on a trip round the world all by himself at the age of twelve. Returning safely from this long journey, he entered the University of Virginia when he was sixteen, and from there he passed to the U.S. Naval Academy in May, 1908.

But it is not for his services as a seaman that Richard Evelyn Byrd will be remembered, although he holds the rank of Admiral. As a matter of fact, he was put on the retired list in 1922 with the rank of lieutenant-commander, and soon after this he began to take considerable interest in Polar exploration. He had already made a study of aviation, and was an experienced pilot, and in 1924 he volunteered to take part in Amundsen's projected flight in an airship to the North Pole, but was refused because he was married. However, in the following year he was off to Greenland with the D. B. Macmillan Expedition, in which he held the position of flight commander, and while there he personally flew 3000 miles and gained experience which satisfied him that it would be quite possible to fly to the Pole and back again in an aeroplane.

So far no such effort had been made, and immediately Byrd returned to the States he began preparations for the flight. This was made in 1926. His experience in Greenland had convinced him that May was the best month for the attempt, so in April he

left America for Spitzbergen, taking with him a Fokker three-engined monoplane. Accompanying Byrd was his friend, Floyd Bennett, and in due course the airmen and their machine arrived safely at their starting-point. Nearly seven hundred miles of sea and ice lay between their base at King's Bay, Amsterdam Island, and the North Pole, but it was straight flying without any high mountain ranges to be crossed, and on May 9 at 12.50 in the morning the historic flight was begun. For once a first attempt was supremely successful. Byrd and his companion flew direct to their goal, circled round the Pole several times, and then set off on the return journey by a slightly longer route, reaching their starting-point at 4.20 in the afternoon. The flyers had been in the air $15\frac{1}{2}$ hours, and during that time had covered 1600 miles.

Having conquered the North Pole by air, Byrd's thoughts naturally turned to the southern extremity of the earth. He realised at once, however, that a flight to the South Pole presented difficulties infinitely greater than any he had encountered in his northern trip. To start with, there was no inhabited country within flying range of the South Pole. This meant that the adventurers would have to take with them every single thing they needed, and that they would have to make their own base in the midst of a land of perpetual ice and snow, and one far more desolate and unkind than anything found in the northern hemisphere.

Accordingly Byrd decided to fit out a proper South Polar expedition in which the flight to the Pole was to be the crowning feat but, at the same time, only one of the ends in view. With this object he chartered three

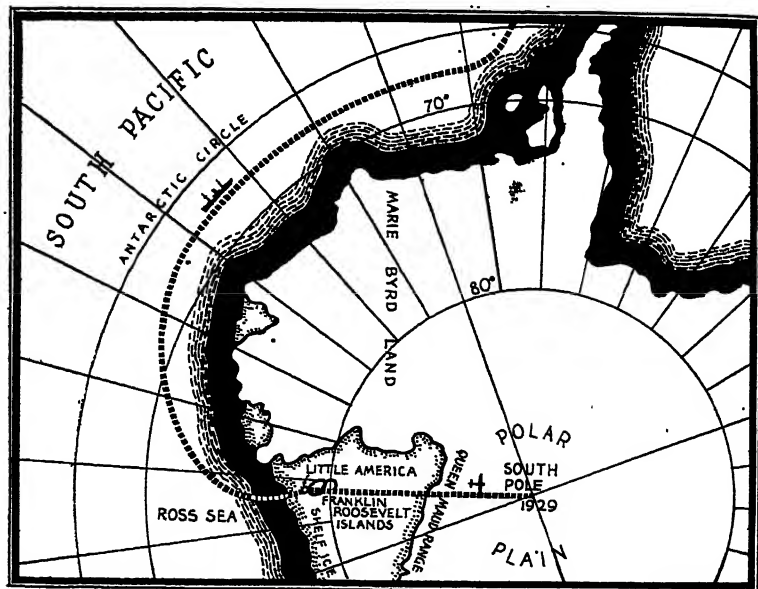
ships, the *City of New York*, the *Eleanor Bolling*, and a whaler, the *C. A. Larsen*, and with these vessels fully laden with stores, petrol, three aeroplanes, and everything necessary to support life in the frozen South, the expedition left America in the latter half of 1928, and in due course arrived off the Great Ice Barrier on Christmas Day.

This ice barrier is a colossal mass of floating ice which juts out from the body of the Southern Continent far into the Antarctic Ocean, and on its seaward side, it presents high ice cliffs to the beholder. It was upon this great ice sheet that the explorers were going to spend the winter, but as immense masses of ice are continually snapping off the Barrier and floating away, it was unsafe to make the camp close to the sea, and finally a spot over seven miles inland was selected for the base of the expedition.

In the midst of that desolate waste of ice, huts were erected, forming a small village, to which the name of Little America was given, and to this village food, fuel, clothing, and everything that could possibly be needed by the explorers had to be dragged on sledges over the ice. The three aeroplanes were landed, and while the summer lasted a good deal of preliminary flying and aerial surveying was done, in the course of which one of the planes crashed in a blizzard, fortunately without injury to her crew. This disaster warned Byrd that the flying season was at an end, so the remaining planes were stowed away in huts built of blocks of ice, and the explorers settled down to pass the long, southern winter.

There was plenty to occupy their time, however.

Scientific and meteorological observations had to be regularly made and recorded. Then there was much to be done in preparation for the important sledge journey of the coming summer in which the geological formations of the Southern Continent were to be studied,



and for Byrd's flight to the Pole. Altogether Little America was a hive of industry throughout the winter months, during four of which the sun never rose above the horizon. But although there was plenty of work there was also recreation. After work hours the explorers played games, or listened to the wireless programmes from all over the world, while by means of their own

transmitters they were in constant touch with civilisation. Then on August 24, 1929, the sun again became visible for a short time above the horizon, and Byrd and his companions knew that winter was almost over, and that spring and summer with all they held in store were at hand.

The geological party got away first, and it was not until November 28 that a wireless report from them, at that time three hundred and fifty miles away to the south, reported the weather favourable, and Byrd and his companions set out on their memorable flight. Their machine was a three-engined, all-metal Ford mono-plane, and fully loaded she weighed seven tons. Flying south Byrd passed over the geological party toiling over the snow below, and threw out a parachute to which was attached a packet containing the latest wireless news from home, tobacco and other luxuries; then on again, now climbing steadily, for in front lay a lofty mountain range which had to be crossed before the Pole could be reached.

Up and up climbed the plane, nearer and nearer loomed the vast, rocky mass ahead, and then suddenly Byrd discovered that the machine was no longer rising, that, heavily loaded as she was, she had reached what airmen call her "ceiling". Disaster threatened! Byrd knew that unless he could get the plane higher they would either crash into the mountains or be compelled to turn back. There was only one thing to be done. The machine must be lightened. At his command his companions began to throw overboard their food, precious food they had brought with them in case they

should be forced to land in the midst of that desert of ice and snow where nothing existed that would keep body and soul together. So three hundred pounds of vital food-stuffs were flung out, and as the explorers watched it falling they knew that they were flinging away their lives if anything should now happen to the plane. But there was little time for thought. The mountains were right in front. Byrd was heading for a pass between towering peaks. The machine was climbing again, but still the issue lay in doubt. Now she was in the pass, flying through a huge gully between mountains, and no one spoke, for each was wondering what the next few seconds would bring forth. Breathless moments these, and then suddenly, as they stared out of the windows, the crew saw that the ground beneath them was receding, and from every throat came a shout of relief and joy as the men realised that they were over the ridge, and that they were leaving behind them the one serious obstacle between them and the Pole.

After this it was all straight flying over a flat tableland, and on reaching the Pole, Byrd dropped overboard a weighted American flag and then turned homeward. This time there were no tense moments. Lighter by all the petrol she had used, the plane crossed the mountains easily and reached Little America in fifteen hours fifty-one minutes from the time she had set out, having during that period flown over sixteen hundred miles of the worst country in the world.

Since then Admiral Byrd has done other great things. In 1933 he led another expedition south, and this time he spent a winter all by himself in a small hut one hun-

dred and twenty miles south of the main base where the rest of the expedition were wintering. Such a lonely vigil among such surroundings would have defeated most men, but Byrd passed his time studying the local conditions and collecting valuable scientific data, and when the relief party arrived in the spring the men found him fit and well, and in no way dispirited by his self-imposed exile.

Admiral Byrd has added largely to our knowledge of conditions on the bleak Southern Continent, and has done work in this direction which to the scientific mind is of far greater importance than his exploits as an airman. But it is probable that most people will always remember him as the man who first flew an aeroplane to the Poles.

THEODORE ROOSEVELT

1858-1919

In the middle of the nineteenth century there was living in New York a family bearing the name of Roosevelt. They were a prominent family in New York society, and Theodore Roosevelt, who followed the calling of glass importer, was descended from Claas Martenszen van Roosevelt who had emigrated from Holland in 1649 and settled in New Amsterdam, the Dutch name for New York before it came into British possession. Theodore's wife, Martha Bullock, was of equally good descent, coming from an old Georgia family of Scotch-Irish and Huguenot origin, and to this couple there was born on October 27, 1858, a son who was destined to become the twenty-sixth President of the United States.

The baby was christened Theodore after his father, and from his birth he was surrounded by almost everything that money and position could bring. He lacked one thing, however, good health. He was a sickly child, but as though to make up for this he possessed a strong will, and as soon as he was old enough to realise his weakness he made up his mind to be as healthy as other children. In this his parents helped him all they could, and a large part of his boyhood was spent at Oyster Bay, Long Island, where the family had a house, and where he passed his time swimming, rowing, riding and walking. Often he was tired, but he persevered, and

gradually he overcame his ill-health, till by the time he entered Harvard University he was as sound as any other youth of his age, and as an undergraduate had the strength and skill to make for himself quite a reputation as a boxer.

On completing his education Theodore Roosevelt made a short trip to Europe, where he climbed the Jungfrau and the Matterhorn; then went back to New York and into the office of his uncle, Robert Barnwell Roosevelt, with the object of studying law. But the prospect of becoming a lawyer and spending his life among dusty deeds and wills did not appeal to young Roosevelt. He wanted to be more in the midst of things, to have some say in the management of his country, so he left his uncle's office and went in for politics, and in 1881 he was elected as a Republican representative to the New York State Assembly.

Roosevelt was twenty-three at this time, and the youngest member of the Assembly, but he soon made his presence felt, and before long there were quite a number of people who heartily disliked him. It came about in this way. There was a great deal of trickery and dishonesty in politics at that time. Men called party bosses said what was to be done and expected their followers to obey them like sheep. Most of them did, but not Theodore Roosevelt. He spoke and acted just as he thought best in the public interest, and paid no attention to the party bosses, and so he incurred the dislike of those men who wished to run the political machine for their own benefit and not in the service of the people.

Theodore remained in politics until 1884; then Grover

Cleveland, a Democrat, was elected President of the United States, and the Republican party was out of power. This ended Roosevelt's public life for a time, so he bought the Elkhorn cattle ranch in North Dakota, and for the next two years lived the rough, healthy, open-air life of a cowboy. He did it thoroughly, too. While on the ranch he ceased to be the rich young city man, but spent his time herding and branding cattle, keeping a look-out for rustlers, fighting prairie fires, and sharing all the dangers and pleasures of the men on his pay-sheet.

In 1886 Roosevelt returned to New York, and put up as Republican candidate for mayor of the city, but was defeated. Two years later, however, Benjamin Harrison, a Republican, was elected President, and thereupon Roosevelt was made a member of the United States Civil Service Commission in Washington. The duties of the Commission were connected with the appointment of persons to government posts. The members were supposed to see that the different jobs were given to the right people, but in the past, to a great extent, the various appointments had been given to the friends and favourites of the men in power, whether they were fitted for the work or not. Roosevelt, with his usual honesty, immediately set out to fight this practice. He declared that government appointments should be given to the men best qualified to fill them, and by so doing he earned the hostility of a great many influential people. Nevertheless, he remained true to his convictions, and during his years in office over 20,000 government posts, which previously would have been given to any Tom,

Dick or Harry who had a friend at court, were filled with people whose qualifications enabled them to give the best service to the country.

Roosevelt remained a member of the Civil Service Commission until 1895; then he resigned and returned to New York, where he became head of the city police. He spent two years on this job, tilting at abuses and following his practice of giving a "square deal" to all, and then, in 1897, President McKinley made him assistant-secretary of the navy.

Meanwhile, a bitter war was raging right on America's front-door step. Of all the vast possessions which Spain had once held in the New World, the islands of Cuba and Porto Rico alone remained to her at this time. This loss of territory was largely due to the fact that the Spaniards were bad colonisers. They had thought only of their own enrichment without regard to the welfare of the subject races, and for centuries the natives of Cuba had suffered under Spanish tyranny and misrule. This had led to frequent outbreaks and insurrections, and in 1895, goaded to desperation by the cruelties of the Spanish Governor-General Weyler, known as "the butcher", the Cubans rose in furious rebellion against their oppressors.

Thereupon followed years of fierce guerrilla warfare in which the mothers, wives, daughters and sisters of the insurgents suffered as much at the hands of the Spaniards as the fighting men. Still the Cubans fought on, while people in the United States watched their struggles with sympathy and loud condemnations of their oppressors, but without giving them any tangible

aid in their fight for freedom. Then, early in 1898, an event happened which was to jolt the Americans out of their apathy. The American battleship *Maine* was in the harbour of Havana, the capital of Cuba, where she had been sent to protect American interests, when suddenly, on the night of February 15, there was a terrific explosion which blew the ship to pieces, sent her to the bottom, and caused the death of two hundred and sixty of her crew. To this day there is no certainty as to what caused the disaster, though possibly it was due to faulty ammunition in the ship's magazine. At the time, however, people in America were convinced that the Spaniards had in some way brought about the destruction of the battleship, and from all over the country came demands that those responsible for the deed should be punished. Some negotiations between the two nations followed, but nothing came of them, and at last, on April 25, 1898, Congress declared war on Spain.

All this time Roosevelt, feeling assured that hostilities with Spain were bound to come, had been busy preparing the navy for war. When he heard of the sinking of the *Maine*, he sent orders to Commodore Dewey, commanding an American fleet at Hong Kong, instructing him to be ready to sail to the Philippine Islands and attack the Spaniards immediately war was declared. Meanwhile, at home he chartered troopships, laid in stocks of ammunition, coal, and other vital supplies, so that when the hour came the United States navy was fully prepared.

Roosevelt felt that he had done his bit as a civilian, and now that fighting men were needed, his one wish was

to get into the front line. So he resigned his post with the Navy Department, and started to raise a regiment of cavalry. This regiment was composed of cowboys and all sorts of expert horsemen, and in due course Roosevelt and his regiment of "Rough Riders", as they were named, sailed for Cuba, under the command of Roosevelt's friend, Colonel Leonard Wood. They landed there on June 2, and were soon in action. Presently Colonel Wood was promoted to a brigade, whereupon Roosevelt was given command of his regiment, and it was as Colonel that he led the Rough Riders at the battles of El Caney and San Juan Hill, where he and they distinguished themselves by their dash and bravery. But the war did not last long. Faced by a strong, well-equipped enemy, the Spaniards quickly collapsed both on land and sea, and on August 12, 1898, hostilities came to an end. As a result of this short but decisive war, Cuba gained her independence under the name of the Republic of Cuba, while the islands of Porto Rico in the Caribbean, Guam in the Pacific, and the Philippine Islands came under the sovereignty of the United States.

Roosevelt's services in the Spanish war made him deservedly popular with his countrymen, and in November, 1898, he was elected Governor of New York State. Again he came up against the party bosses who wished to dictate the lines along which he should administer the State, and as before he refused to bow to their wishes. As a result many prominent Republicans in New York State found themselves poorer in pocket, for the policy of the new Governor curtailed the powers

which in the past they had used to increase their personal gains. Actually, Roosevelt was much too honest a man for many of the people with whom he worked, so at the end of his first two years in office they plotted to get rid of him.

As it happened, there was a means ready to hand which they thought would serve their purpose admirably. A new presidential election was due in November, 1900, and Roosevelt's enemies hoped that if they could get him elected Vice-President, they would be rid of his interference for good. This hope was based on a curious feature of the American system of government by which, while the President has very great powers, the Vice-President has little influence either in making the laws or in shaping the policy of his party, so that the politician who becomes Vice-President usually falls into complete obscurity. Such might now have been Roosevelt's lot, but for a trick of Fate which brought all his adversaries' carefully laid schemes tumbling back upon them to their own discomfiture. In due course the election took place and William McKinley, the Republican candidate, was elected President of the United States with Theodore Roosevelt as his Vice-President. So far all had gone as Roosevelt's opponents had planned, and they must have been congratulating themselves on their successful tactics, when, in September, 1901, President McKinley was assassinated, and Roosevelt, the man his enemies had wished to force into the background, automatically stepped into his place as President and ruler of the nation.

Roosevelt was forty-three when he became President,



ROOSEVELT AND HIS MEN DISTINGUISHED THEMSELVES
BY THEIR DASH AND COURAGE

and before he quitted that office in 1909—he served two terms as President—he was the most popular man in the country with the great masses of the people. His genial and democratic nature—Ambassadors, cowboys, Senators, prize-fighters, clergymen and labour leaders were numbered among his friends—endeared him to all. People honoured him, too, for his unflinching honesty, and the hatred of political corruption which he had shown in his dealings with the party bosses and others, and which he now took with him into his new high estate. Roosevelt was a people's President. He was the friend of the little man. Birth and wealth counted nothing with him if they were not allied with honesty of purpose and individual merit, and the lesser-known man, whose qualifications and character fitted him for a post, was always sure of his support in preference to the rich man's favourite.

From the very beginning of his work as President, therefore, Roosevelt set himself to fight corruption and dishonesty both in politics and in the life of the nation at large. In his speeches he exhorted those people holding responsible positions to remember their obligations, and to use the power which went with their offices for the public good and not for their own advancement. By these means and by his own public example he gradually attracted to the government services a more disinterested class of men who put their country first and themselves second.

Roosevelt's efforts to check corruption in civil life were directed mainly at the big business men and Trusts. A Trust might have one man at its head or

several, but the object was always the same, to gain control as far as possible of some article of commerce or a public service with the object of making money. Thus one man or group of men might form a Sugar Trust, another a Coal Trust, a third a Railway Trust, and having obtained control over all the available stocks of sugar and coal and all the railways in a district, the men at the head of the Trusts were able to sit back and watch the dollars roll in. For people had to have sugar and coal and they had to travel on the railways, and controlling the only sources from which these needs could be supplied, the Trusts were able to charge what they liked for their goods and service, whether it was a fair price or not. Usually it was not a fair price, with the result that the poor people paid more than they could afford to make rich people still richer, while thousands of small tradesmen were annually crushed out of business by the big combines and ruined.

This was the kind of dishonest business which Roosevelt hated, so he set out to smash the Trusts, with what he called the Big Stick. To their amazement and anger rich men, who had thought themselves above the law because of their great wealth, found themselves summoned before the courts of justice, and punished, and their unlawful corporations broken up. In this way Roosevelt made many enemies, but the American people as a whole rejoiced in the discomfiture of the dishonest and unscrupulous financiers, and hailed him as their friend.

But Roosevelt was a clever statesman as well as a stern fighter. It was he who was responsible for the

peaceful settlement of a disastrous coal strike in 1902. In foreign affairs he had a firm hand, and once checked a German attempt to occupy a port in the Caribbean Sea by mobilising the American fleet, while he was largely responsible for bringing about peace between the Russians and Japanese in 1905. For this service to humanity he was awarded the Nobel Peace Prize. The most striking achievement of his presidency, however, and one which will ever remain a visible monument to his vigour and determination, is the Panama Canal. The canal was not opened until August 15, 1914, but it was Roosevelt who gained the friendship of the new Republic of Panama, and obtained from its government the right to build a canal through its territory, and thus join up the Caribbean Sea with the Pacific Ocean. In the second World War the Panama Canal formed one of the most vital links in the sea communications of the United Nations, saving as it did thousands of miles of sea travel round Cape Horn, and that it was there to help us we owe primarily to the foresight and inspiration of Theodore Roosevelt.

Roosevelt's second term as President of the United States came to an end on March 4, 1909. He left the White House—the home of the Presidents—with an immense reputation for honesty, energy, and fearlessness, both in America and throughout the world, and at the height of his popularity. He had done much to remedy the most glaring abuses in his country's civil and political life, and now he promised himself a holiday. Already his plans had been made, and on March 23 he sailed for Africa, and there, in company with his son

Kermit and the famous African hunter Selous, he went on a long trip through the wilds, partly for scientific purposes and partly to hunt lions, buffaloes, rhinoceroses and other big game.

This trip lasted the best part of a year. In March, 1910, he was in Egypt, and from there he visited in turn most of the countries of Europe, where he delivered several fine lectures and speeches, and everywhere received proof of his personal popularity abroad. While in England, he represented the United States at the funeral of King Edward VII, and finally arrived home in June 18, 1910.

In the presidential election of 1912, at the earnest entreaty of many friends, Roosevelt stood again as Republican candidate in opposition to William H. Taft, also Republican, and Woodrow Wilson, the Democratic candidate. He was unsuccessful, however, probably owing to the fact that he and Taft split the Republican vote between them, and thus allowed Woodrow Wilson to secure a victory.

This marked the end of his public career, and he now went on a trip to South America. While there he visited several countries, and finally set out in 1913 on a journey of exploration in Brazil, during the course of which he came upon an almost unknown river and followed its uncharted course for six hundred miles. To commemorate this feat the Brazilian government named the river the Rio Teodoro.

In 1916 his friends tried to secure his nomination as Republican candidate for the next presidential election, but they were unsuccessful, and he accepted his defeat

with a good grace. Meanwhile, the World War of 1914-1918 had broken out, and Roosevelt, who was in favour of American intervention in the conflict, did his best to persuade his countrymen to prepare themselves for the struggle. In April, 1917, the United States at last declared war on Germany, and Roosevelt, though in his sixtieth year, immediately offered his services, and actually applied for an active service commission in France. This was denied to him on account of his age and health, which had been undermined by the hardships he had endured while exploring the Rio Teodoro, and was, indeed, failing at this very time. His four sons, however, went to the front, where one of them lost his life. Theodore Roosevelt's own days were already numbered, though he continued active, speaking and writing, to the very end, which came on January 6, 1919, when he passed away quietly in his sleep.

Theodore Roosevelt will be remembered chiefly for the remarkable work he did during his two terms as President. He was also a great open-air man and traveller, but what is less well known is that he was a writer of considerable reputation. At the age of twenty-four he wrote a history of the War of 1812 between Great Britain and the United States which has been accepted as the leading work on that conflict. Another of his books, *The Winning of the West*, is accounted the best description of American frontier life during the nineteenth century. In his *African Game Trails* he not only records his adventures in Africa but supplies a large amount of valuable information upon the races and the customs of the people with whom he came in

contact. Roosevelt's published works in all fill thirty volumes, and deal with such different subjects as history, sport, travel and politics, no mean contribution to literature from a man of such wide interests.

If it is a sign of a man's greatness that all things he does he does well and with his whole heart, then Theodore Roosevelt deserves a high place in America's roll of famous men.

WOODROW WILSON

1856-1924

On December 28, 1856, there was born in Staunton, Virginia, a baby boy who, when he grew to manhood, was to behold a magnificent vision, to give to the world a new hope, and then to see the great thing he had created cast aside, not by foreign nations but by his own countrymen. The name of this little boy was Thomas Woodrow Wilson.

"Tommy", as he was called during his childhood, was of Scottish descent, though on his father's side the family had lived in County Down, Ulster, for two hundred years before his grandfather, James Wilson, emigrated to America in 1808. His mother, before her marriage, had been Miss Janet Woodrow, daughter of Thomas Woodrow, a Glasgow graduate, and both his parents belonged to the stern Presbyterian creed. Tommy's father was, in fact, a Presbyterian minister in Staunton, poor in pocket but rich in intellect, and it was in an atmosphere of mild poverty, books, kindliness, and a deep religious faith that young Wilson passed his boyhood years.

The boy was not strong; indeed, he did not go to school till he was nine, and though he was not a spoilsport, games held no special appeal for him, and all his life his interests were more of the mind than of the body.

Wilson was four when the Civil War began in April, 1861, and the following year the family moved south

from Virginia to Georgia, and later north again to South Carolina, where Wilson's father secured a post as college professor. The future President of the United States was therefore not far away when General Sherman made his terrible march from Atlanta to the sea in 1864 (*see* the chapter on Lee and Grant), and later on from Savannah northward through the Carolinas to join General Grant in his crowning efforts to crush the Confederate general, Lee, and bring the war to an end. The sensitive and weakly boy thus saw and heard something of the terrors of war, and when that war was over he saw still more of the want, despair, and all the suffering which war brings in its wake, and which fell like a terrible plague upon the conquered Southern States in the years following the conflict. Without doubt young Wilson was deeply affected by all the misery he witnessed around him during these years, and very likely his experiences at this time were largely responsible for the hatred of war which he carried with him to manhood, and the desire that grew up in him to rid the world for ever of that scourge.

Thomas Woodrow Wilson entered Princeton University in 1875. He was then in his nineteenth year, and though he made no particular name for himself as a scholar, he took a leading part in debating societies, and became known as a great reader of books, especially those dealing with history and politics. In his quiet way he was popular with his fellow undergraduates, and he was elected student director of athletic sport. From Princeton he went on to the University of Virginia, where he studied law, and after being admitted

to the bar he opened an office and practised for a short time at Atlanta. But his heart was not in his profession, so he gave up his law practice, and entered John Hopkins University at Baltimore in Maryland, with the object of studying government and history. While there, in 1885, he married Ellen Louise Axson of Savannah, Georgia, and the following year he passed out of the university with the degree of Ph.D.

As yet there was no suggestion of Woodrow Wilson—he dropped the “Thomas” when he reached manhood—entering politics. His idea was to be a teacher of history and the art of government, and the first post he secured was that of professor of history and political economy at Bryn Mawr, the famous college for women, near Philadelphia. He stayed there until 1888, when there followed two years in a similar capacity at Wesleyan University, Connecticut, and then, in 1890, he returned to Princeton, this time not as a student but as professor of jurisprudence, or the science of law, and political economy.

Woodrow Wilson soon became popular as a Princeton professor. He was an eloquent lecturer and had the gift of making the most difficult subjects easy to understand, and after being at Princeton twelve years, he was made president of the university in 1902. Meanwhile, he had earned for himself widespread recognition outside the university by means of his speeches and published articles on government, law and history. On all these subjects he displayed a deep knowledge, and his reputation increased to such an extent during the eight years he was president of the university, that people

began to think of him as a man qualified by his gifts for an even higher position. Surely, they argued, a man with such profound knowledge of history and law was just the sort of man needed to help govern the country. So the idea grew until in September, 1910, the Democratic party offered to nominate him as their candidate in the coming election for Governor of the State of New Jersey.

As a matter of fact, this offer came just at the right moment. As president of Princeton, Woodrow Wilson had set on foot many reforms in the educational and social life of the students. These reforms had met with much opposition from various quarters, and now he gladly seized this chance to resign the presidency and enter upon the wider life of real politics instead of merely lecturing about it. Accordingly, he agreed to stand, and in due course he won the election and became the Governor of New Jersey.

So the college professor became a politician, and he quickly proved himself to be a very able one into the bargain. Like Theodore Roosevelt he soon made it plain that he had no intention of being the servant of the party bosses, but was going to fulfil to the best of his ability all the promises he had made in his election speeches. With this object many bills were presented to and passed through the State Senate and Assembly, the object of which was to reform the political life of the State and protect the public against the Trusts, very much as Theodore Roosevelt had striven in a larger sphere to bring about similar results.

More than most men's, Woodrow Wilson's rise to

fame was very rapid. In 1910 he was a college professor, in 1913 he was the first man in the United States, and stood forth before the nations as ruler of one of the greatest countries in the world. His two years as Governor of New Jersey had much to do with this swift change in his fortunes. He had proved himself an able reformer, an upright and honest leader, and when the Democratic National Convention met at Baltimore in June, 1912, to elect a candidate for the next presidential election, several of the delegates who had been on the look-out for just such a man to represent their party, put him forward for nomination. There was stiff opposition, however. Many of the delegates wanted a man who would be more amenable to party control and did all they could to prevent Wilson's nomination, but in the end he secured the necessary majority of votes, and was chosen Democratic candidate for the Presidency. The election took place the following November. Wilson's opponents, representing the Republican party, were Theodore Roosevelt and W. H. Taft, and it was partly due to this split in the Republican ranks that Wilson emerged victorious from the contest, and on March 4, 1913, assumed office as the twenty-eighth President of the United States.

The new President soon proved that he intended to lead the nation just as when Governor of New Jersey he had led the State. Now in a way, in spite of his deep learning, Wilson was a narrow-minded man. He found it very difficult to see the other side's point of view. His wide reading and immense knowledge of history and the art of government had given him a firm belief in

himself and his judgment, and he never met opposition without the conviction that he was right and the other man wrong. In short, he liked to have his own way, and insisted that he got it, although at the same time, his efforts were directed to what he honestly believed to be for the benefit of his country and the world. He had no axe of his own to grind. He was a disinterested ruler, an idealist, and as we shall see, in the end the leader in a great cause.

The first legislation of Woodrow Wilson's presidency had to do with reduced tariffs, income tax, currency reform, and various acts were also passed with the object of still further checking the power of the Trusts. Meanwhile, trouble was brewing in Mexico. President Diaz, who had ruled the country for thirty years, had been deposed and driven out, and Francisco Madero had been elected in his place. He, in turn, was murdered by General Huerta, who was later compelled to flee the country and take refuge in Europe. This left two men, Carranza and Villa, struggling with opposing factions to gain control of the country, and when finally Wilson's government recognised Carranza as ruler of Mexico, Villa returned to his old occupation of bandit and outlaw. With him he carried a bitter grudge against the United States, and in the hope of embroiling the two countries in war, he led his bandits across the border, where they raided American towns and killed American citizens in their homes.

Naturally no nation could permit such a state of affairs, and as Carranza seemed unable to keep order, President Wilson sent a military expedition under

General Pershing into Mexico. He did this reluctantly and without any idea of protecting American interests in Mexico, or forcing sane government upon the country. Mexico, Wilson insisted, must work out her own salvation, and Pershing's task was simply to hunt down and punish the bandits who had raided American territory. This policy of Wilson's was unpopular in the United States, and to make matters worse, Pershing's efforts to bring the bandits to book met with little success. Secure in their knowledge of the mountain trails, Villa and his followers eluded all efforts to capture them, and at last, in January, 1917, the American troops were withdrawn from Mexico without having effected any definite improvement in the situation.

In the meantime an event of much more concern to the whole world had occurred, the outbreak of the first World War on August 4, 1914. At first large numbers of people in the United States took little but a passing interest in the conflict. It was no concern of theirs, they argued, and anyway, as far as they could see, one side was as bad as the other, so let them fight it out between themselves if they must fight. This was a state of mind that people in Britain found it very difficult to understand. Germany had broken her pledged word. Her armies had invaded Belgium, thereby breaking her promise to respect the neutrality of that little country, while Britain, honouring her obligations, had immediately declared war on the aggressor. Surely there could be no two views on the right and wrong of such a situation? Germany was so clearly out for power and conquest. Britain and France were so plainly

battling on the side of freedom and the right of small nations to live their own independent lives free from the domination of their stronger neighbours. That was the situation as the people of Britain and France saw it; yet in the United States, though there were thousands of clear-headed people who saw the true picture, there were millions who still thought of Britain as their old enemy in the War of Independence, or who were too ignorant of world conditions to realise what was going on across the Atlantic. Again, America had great numbers of citizens of German and Irish origin who were hostile to Britain, while there were others of pure American birth who were simply determined to do everything possible to keep their country out of the war. These were the Isolationists, men who wished to keep America shut up as it were in a great box. Her duty, they said, was to consider only her own interest and advantage. Let the rest of the world fight as much as it liked, they cried, Americans must only occupy themselves with their own affairs. Therefore immediately war broke out, all over the States these people raised their voices and took up their pens, and in public speeches and newspaper articles insisted that America must not interfere, and that it was no concern of theirs which side won or which lost.

In a way President Wilson might have been called an isolationist. He certainly knew which side was battling for the right, but he was leader of the American nation, and he hated war, and he considered it his duty to keep his people out of the conflict as long as possible. Accordingly, on August 4, 1914, he issued a proclama-

tion declaring that the United States favoured neither one side nor the other, and called upon all Americans to be strictly neutral both in thought and in deed.

But it is one thing for a great nation, with world-wide interests, to declare itself neutral in a war and another to maintain that attitude. Sooner or later she is bound to be affected, especially in her sea-borne trade, and so it was with the United States. Britain held command of the seas, and as one way of hindering Germany's war effort, she soon brought into play the old weapon of blockade, by which she strove to stifle Germany's trade and prevent the entry of anything into that country which might assist her in carrying on the war.

Thus before long American ships were being detained and searched for contraband by the British Navy, and this went on, despite various protests from the American government, right up till 1917. It was a matter in which Britain had no choice. She was fighting for her life, and she dared not let vital cargoes of food and other goods reach Germany, even if they came from a neutral country in that country's ships. So almost from the beginning the isolationist creed collapsed, and Americans found it was impossible to remain aloof and unaffected by the war.

Meanwhile, Germany started her own blockade of Britain, and not being a match for the British fleet on the surface of the sea, she sent forth her swarms of U-boats to prey upon British merchantmen and all ships trading with British ports. So far as her efforts to blockade Britain went, Germany was within her rights; where she transgressed against the laws of humanity

was the way she carried out the task. Britain merely detained neutral ships without endangering the lives of the crews; the Germans, in their desperate efforts to starve Britain into submission, sank the British merchantmen and often fired upon the crews who had taken to the open boats, thus destroying their sole chance of survival.

For a while, however, little change took place in American opinion; indeed, many Americans were just as much incensed against Britain for her blockade methods as against Germany. Then on the afternoon of May 7, 1915, the Cunard liner *Lusitania* was torpedoed and sunk by a U-boat with the loss of 1198 men, women and children. It was a fiendish deed, but what brought it especially home to the American public was the fact that there were 124 Americans among the dead. The great Republic had been touched at last.

She had been touched but not roused. President Wilson sent vigorous protests to Germany which at length drew forth a promise that in future liners should not be sunk without warning and that passengers should be given the opportunity to save their lives. Meanwhile, the large mass of the American people remained apathetic. They did not want war: better by far put up with a few sinkings than draw that calamity upon their country. Accordingly, encouraged by this attitude, the U-boats became more and more violent in their methods. British ships were sunk in scores and hundreds and their crews left to die, and then, on January 31, 1917, the German government finally dropped the last vestige of pretence, and issued orders

to its submarine commanders to sink at sight all ships trading with Great Britain, no matter what flag they flew, or from what neutral port they came. Unrestricted submarine warfare had been declared!

Here was a challenge to the world and the United States in particular which could not be ignored. The American nation was roused at last, and President Wilson acted at once. The previous year he had been re-elected President for a second term on the strength of his determination to keep his country out of the war, and on a plea for "peace without victory" he had even attempted to persuade the warring nations to consider a peace conference in December, 1916. Now he saw with deep regret that such hopes were no longer possible, and a few days after the German declaration, the German ambassador was dismissed and relations between the two countries finally broken off. Still war did not start at once, and desperate efforts were made to preserve peace right up to the last moment. Then, on March 16, 1917, came the final straw. German submarines sank three American ships with loss of life, and on April 6, 1917, the United States declared war on Germany.

Woodrow Wilson was a man of peace. He hated force as a means of settling disputes between nations. In his efforts to keep the United States out of war he had endured much. Many people, indeed, thought he had been weak in his dealings with Germany, but now that he had been compelled to declare war, he was determined that his country should fight it with all its power, that it should fight, to use his own words, "for the

ultimate peace of the world, and for the liberation of its peoples, . . . for the rights of nations great and small and the privilege of men everywhere to choose their way of life and of obedience. The world," he declared, "must be made safe for democracy."

Of the great deeds performed by the American soldiers in France there is no room to tell here, except that they arrived after the hard-pressed Allies had been holding the fort for thirty-three grim and terrible months, and brought with them the sure promise of final victory. At home, while doing all he could to encourage the war effort, President Wilson was also thinking of how the coming victory of the democracies might be turned to good account, and result in a just and lasting peace. With this object in view he resolved to appeal to the people of the enemy nations over the heads of their rulers, and in a speech on January 8, 1918, he set forth his famous Fourteen Points which he considered necessary to a settlement that promised a happier future to the world. When in the following November the German armies finally collapsed, the German commissioners accepted these fourteen points as a basis for the signing of the Armistice.

But it was in his great conception of a League of Nations which Wilson now gave to the world that there lay the best hope of lasting tranquillity. This League was to be a family of Powers, great and small, pledged to settle their differences by peaceful methods, to protect the weak against the strong, and if necessary to join together to crush by force any one of their number who should forget his obligations and seek to attain his

ends by the use of might. It was a tremendous idea! President Wilson himself came to Europe in December, 1918, to attend the first peace conference in Paris, and to make sure that his League was included in the Treaty of Peace. In so doing he ignored the usual rule that a President must not leave the States during his term of office, but the immense enthusiasm with which he was welcomed in Europe showed how much his presence was appreciated, and how great were the hopes which the war-weary people of the Old World placed in Wilson and his League.

At that time Europeans imagined that President Wilson had the full support of his countrymen in his determination to create a family of friendly nations pledged to mutual assistance, but unfortunately this was not the case. Now that the war was over the chief desire of millions of Americans was to have done with the Old World and all its jealousies and troubles, while in Europe the old rivalries between the different nations raised obstacles to the scheme which were not to be easily overcome. Nevertheless, in spite of all difficulties, the first draft of the Covenant of the League was completed before Wilson returned to America in February, 1919. He was back in Paris in March, but already it was plain to him that neither in Europe nor in America had the lessons of the war been fully learned, and that the people of neither hemisphere were yet ready to play their parts unselfishly in the formation of a better world. It was a bitter disappointment and more were to follow, for when it came to making the Peace Treaty, Wilson found himself compelled to witness the



WOODROW WILSON SIGNS THE PEACE TREATY AT
VERSAILLES

sacrifice of many of his most cherished ideas. Still, the League was formed, and in April the Covenant was adopted, and after the signing of the Treaty on June 28, 1919, the President finally left Europe for America.

He brought back with him, for ratification by the United States Senate, the Peace Treaty and the Covenant of the League of Nations. He still believed that it would find acceptance among his people, and that Americans, having helped to win the war, would in the end be equally willing to help to preserve the peace. But during his absence the Isolationists had been busily working against him. They said that America had got Europe out of a mess which was really none of her business, and now the nations of the Old World must look after themselves. Certainly the United States must not join the League, for if she did, without doubt the day would come when she would again be drawn into a struggle which did not directly concern her.

So the opponents of the League argued, and they carried an immense number of their countrymen with them. President Wilson went on a special tour through the States to explain the principles of the League to the people and endeavour to win their support, but his health broke down under the strain, and he was forced to return to Washington. His collapse doomed the League so far as the United States was concerned. Had he retained his health he might have carried the day, but as it was, when it came to the final voting, the Senate refused to ratify the Peace Treaty as it stood, and the ailing President saw the noble aim for which he had

striven so hard frustrated to a great extent by his own countrymen.

In this period of disappointment and failing health Wilson must have found some consolation in the honour in which Europeans held him for his labours in the cause of world peace, and as a mark of this respect he was awarded the Nobel Peace Prize in 1920. Happily for him, perhaps, he did not live to see the collapse of the League and all the hopes he had founded upon it, with the coming of another world war such as he had planned to avoid. From the illness which overtook him in September, 1919, he never recovered, though he lingered on in retirement in Washington for over four years before he passed away in his sleep on February 3, 1924. He was one of the many who have failed though they fought for a good cause. The glory of having given the world a new hope will always be his, and if with the outbreak of another World War his work appeared to have crumbled into utter ruin, the inspiration still remained to form the foundation of a finer and more stable edifice of world order in the years to come.

HENRY FORD

1863—

There has never been such a country for rich men and huge business organisations as the United States of America, and millionaires such as J. D. Rockefeller of the Standard Oil Company, the Vanderbilts with their vast transport interests, great landowners like the Astors, and others, have become household names all over the world. Numbers of them have amassed fortunes ranging into scores of millions of dollars, but of them all no one exerted a greater influence on American industry than Henry Ford. He was different, too, from some of the other multi-millionaires whose large fortunes have been made by methods of which no one could approve, for Ford, as the reader will learn, acquired his wealth through his own native shrewdness and by sheer, honest hard work.

William Ford, Henry's father, was of English descent, having emigrated to America in 1847, and settled on a farm at Dearborn, near Detroit, in Wayne County, Michigan. There he married Mary Litogot, the daughter of Dutch parents, and on July 30, 1863, a son was born to whom the happy couple gave the name of Henry. Thus the man who was to set half the world on wheels spent his childhood among the clucking of hens, the lowing of cattle and all the other sights and sounds inseparable from a farm. His schooling was such as any country boy received in those days, and continued until

he was fifteen, and when he was not doing lessons he helped his father in the stables, in the cowsheds and on the land. Young Henry did not like farming very much. His mother died when he was twelve, and thus he lost one of the ties which might have kept him at home; but he was a mechanically minded boy and quite early came to the conclusion that there was too much drudgery in a farmer's life. He thought it should be possible to invent machinery which would considerably lighten the farmer's labour, and made up his mind to be a mechanic when he grew up instead of a tiller of the soil.

Henry's interest in things mechanical manifested itself at an early age, and his first effort in this direction was to take a watch to pieces and successfully put it together again. He was thirteen at the time, and watches soon became his chief interest in life. From a broken watch-spring he manufactured a pair of tweezers, an old knitting-needle ground down supplied him with a screwdriver, and with these as his only tools he set up as an amateur watch repairer, mending the neighbours' watches when they went wrong, for the sheer joy of the work, and never charging a cent for his labour.

Young Ford left school in 1878, and for a while continued to help his father, but the following year, at the age of sixteen, he turned his back on the farm and walked to the neighbouring city of Detroit, where he got a job in a machine shop. He was only an apprentice, however, with a weekly wage of two and a half dollars, about ten shillings, for a ten-hour day, and this was not enough to keep him. Something had to be done, for he did not want to ask his father for help. So he went to

a local jeweller, and having given proof of his skill, was taken on as an assistant, and worked from seven to eleven every evening mending watches for an extra two dollars a week.

Henry Ford was clearly not afraid of work provided it was of the right kind, and the next year he entered an engine shop, where he spent two years and learned a good deal about the building of engines. From there he obtained a job with another manufacturing company, where he assembled and repaired small steam engines for use on the land. He was two years with this firm. Meanwhile, he had gone home to live, and all his spare time was spent in a little workshop he had set up on the farm, trying to build a light steam tractor which would take the place of horses.

Henry was contented but his father was not. He wanted his son to be a farmer, and was always trying to persuade him to change his occupation. But Henry turned a deaf ear to all entreaties until, in 1884, Ford senior came forward with an offer of forty acres of land provided Henry would give up his project of becoming an engineer, and settle down contentedly to a farmer's life.

It was an offer young Ford did not like to refuse, so he accepted it. The land was wooded, and he cut down the trees, built a sawmill, and sold the timber. With some of the wood he also built himself a house on his land, together with a workshop where he could follow his mechanical bent during his spare time. In 1887 he married Miss Clara Bryant, and in the same year the call of the machine became too strong for him, and he

finally gave up all idea of ever becoming a farmer. So once again, somewhat like a modern Dick Whittington, he turned his steps towards Detroit, and became an engineer and machinist in the Edison Illuminating Company. Henry Ford had turned his back on the land for good, and before him lay the road up which he was to climb to fame and fortune.

One wonders if Ford had any idea in those days of the heights to which that road was to lead him. Hardly, though no doubt he was fired with the resolve to succeed. But he was already possessed of a conviction, bred of his drudgery on the farm, which was to control the whole of his commercial life. This conviction was that machinery should be the servant of the many and not the plaything of the few, that its function should be to lighten the labours and bring pleasure into the lives of millions of hard-working people, and not merely to increase the ease and enjoyment of the idle rich. We shall see the effect of this conviction when he launches out as a producer of motor cars. Meanwhile, he devoted all his leisure to working on his first motor car, and on a petrol-driven internal-combustion engine which was to drive it.

At this time Ford was fortunate enough to meet and say a few words to Edison himself. The great man took a liking to his employee, and encouraged him in his enterprise, so that by 1892 Ford had completed his first motor car, and in the following year it was actually on the road.

According to modern standards this first Ford car was a very queer-looking affair. It was just like a light,

four-wheeled horse cart without a horse. The engine, which was over the rear axle, had two cylinders and developed only four horse-power. It made a good deal of noise and emitted a considerable smell, but the car could move at—for those days—the terrifyingly dangerous speed of twenty miles an hour. As may be imagined this car was a sight and a wonder to the citizens of Detroit whenever Ford drove it through the streets of the city. Small boys were particularly curious, just as they are to-day, and such interest did it cause that whenever the driver left it for a few minutes he had to fasten it to a lamp-post with a padlock and chain in case some enterprising spirit should start the engine by accident and set the car careering down the street. Ultimately, having covered about one thousand miles in this car, Ford sold it for two hundred dollars (£40), and used the money to start building a new and better one.

In the years that followed, Ford continued working for the Edison Company, but at the same time he laboured hard to interest people with money in his car, and by 1899 he had so far succeeded that he had sufficient backing to start the Detroit Automobile Company. Ford's position in the new company was that of chief engineer. He also held a number of shares, but not enough to give him much say in the activities of the firm, and before long he was at loggerheads with his partners. They wished to build expensive, luxurious cars such as only rich people could buy, while Ford, true to his conviction, wanted to provide cheap cars within the reach of the ordinary worker. As neither



FORD'S FIRST CAR WAS A SIGHT AND A WONDER
TO THE CITIZENS OF DETROIT

side would give way, Ford resigned his position with the company in 1902, with the intention of starting a manufacturing firm of his own at the first opportunity.

Meanwhile, he rented a shed which he turned into a workshop and where he carried on with his experiments and built several cars. Among these were two racing cars which he christened the "Arrow" and the "999". They were four-cylinder, 80 H.P. cars, and Ford built them on purpose to attract people's attention to his name and his cars. They were actually a form of advertising, for he realised that nothing would convince people more quickly that he had something worth buying than if his car won a few motor races. In this the "999" was so successful that it won every race for which it entered, and so gained an immense reputation.

Motor racing in those days was much more risky than it is to-day. There were no banked tracks as at Brooklands to enable a car to take a curve safely at high speed. The tracks over which the "999" careered were just plain, flat going, and an account of one race, in which Barney Oldfield, a track cyclist, piloted Ford's car, gives a good idea of what was required of the driver bent on winning. To start with, the car was so heavy to handle that it required all Oldfield's strength to steer it. Fortunately he was not troubled with nerves, so having got the car started, he opened the throttle to its widest and went full-tilt round the track, taking the curves at the same pace as the straights, and eventually reaching the winning post intact and half a mile ahead of his nearest competitor.

In such a manner Henry Ford inaugurated the Ford

Motor Company which was to achieve world-wide fame. The year was 1902. At first he was still without complete control—this did not come about till 1919 when all the remaining shareholders were bought out by himself or his son Edsel—but this time his position was sufficiently strong for him to decide the type of car which was to be made. It was to be a cheap car, as we already know, but also a car easy to handle, and it was to be well and strongly made. Such a car, Ford was convinced, would sell well, and because he was determined to give good value for the money, he felt sure that the car would advertise itself, and that satisfied owners would not only recommend Ford cars to their friends, but when the time came to replace an old car, would buy another of the same make.

So work was started on the "Model A" Ford. It was an 8 H.P., two-cylinder car with a chain drive, and 1708 of these cars were sold in the first year. But Ford was not satisfied with this model, and in the years which immediately followed he brought out several improved designs with four and six cylinders. Meanwhile, he had discovered a new kind of steel which combined lightness with strength, and in 1909 he introduced the famous "Model T". In order to reduce still further the cost of manufacture, and so that the best possible car should be produced at the lowest possible price, he decided to make only one chassis, and to paint the car black. There was to be no choice for the customer. Everything about the car was to be standardised, and those who wanted maroon, blue, green or grey cars and fancy shapes might go to other makers if they thought they could

get as good a car as he would give them at the price he asked. Many people, indeed, prophesied that this would happen, that the public would not be content with one choice and one choice only, but his output, which jumped from six thousand cars in 1908 to thirty-five thousand in 1911, proved conclusively that Ford was right and his critics wrong.

There was one exception, however, to the rule Ford laid down that his factory should make only one type of motor vehicle. Remembering his own farming days and the drudgery at which he had rebelled, he also made a cheap light tractor for work on the land, and during the war of 1914-1918 this tractor was exported largely to England, where it brought under cultivation much hitherto unused land.

Ford was on the way to becoming a very rich man, nevertheless he remained faithful to his conviction that the function of machinery was to lighten the labours of the working man and woman. In this he was still not certain that he had done all he could do. If he could lower the price of his car still further, while retaining the same good quality of material and workmanship, everyone would benefit, for he would sell more cars, and more people would be able to enjoy the ease and pleasures of motoring. So he set to work to devise fresh means of economising time and labour, by which alone it would be possible to reduce the cost of manufacture and consequently the price of the car, and in 1913 the assembly line was introduced into the Ford factories. The theory of the assembly line was that the work should be brought to the workers on a conveyor belt instead of the men

going to seek it. Each man was allotted a special job in the assembly of the cars, and stood at a certain place beside the moving belt. As the belt brought a car or part of a car to him, he performed his particular task, and then saw it pass on to the next man who did something else, while he stood ready to repeat his job as the next piece of the car moved towards him. Some men found this constant repetition of the same task monotonous, but as a rule it worked well enough, for care was taken that each man did the job he was best fitted for, and Ford paid good wages for honest work. Anyway the success of Ford's efforts to produce a cheaper car is proved by the fact that whereas the early "Model T" cars were sold for eight hundred and fifty dollars (£170) the same car could be purchased for three hundred and ten dollars (£62) in 1926, and this although it was a better car and the cost of materials and labour had increased.

Meanwhile, the first World War had begun in 1914, and the "Tin Lizzies", as the Ford cars were derisively or affectionately named, played a yeoman part in Europe. In 1915 Ford's millionth car was produced, and in the same year he chartered a ship and sailed for Europe in an effort to end the war. For all his business acumen Henry Ford was something of an idealist. He hated and always had hated war, and he had an idea that he and his "Peace Ship", as it was called, might in some way compose the differences between the opposing sides, and bring about peace. We know that the effort was a failure, and in 1916 he returned to America, and when the United States entered the war

in 1917 his plants were converted to war work. In November, 1918, the war came to an end, and Ford's factories turned again to the making of motor cars, and by 1926 they were turning out two million cars a year. They were still the famous "Model T", and the following year Ford produced his fifteen-millionth car.

The same year also saw a tremendous change-about in the Ford undertakings. Up till that time the "Model T" had satisfied the public's needs, but now, with improved taste and greater competition to face, Ford realised that he must turn out a more attractive car if he was to retain his foremost position in the cheap-car market. A change of this kind meant the transformation of his whole organisation. The plant in all his factories was specially designed to produce the standard "Model T", and if new types of car were to be manufactured, much of the machinery would have to be altered, while a great deal would have to be scrapped altogether and new plant installed. Still Ford did not hesitate. Rather than make the change by instalments, he closed his factories altogether for six months while the necessary alterations were made. The cost was colossal. It has been calculated that two hundred million dollars, or about forty million pounds, were expended before the work was complete, and it all came out of the pockets of Ford and his son. And besides this huge sum paid out, there was also a dead loss of millions of dollars incurred by the stoppage of all production for half a year.

At last the alterations were completed, and work started again in the factories. Cars began to run off the

assembly lines, but it still remained to be proved if the new Fords would be as popular as the old, and if enough would be sold to reimburse their maker for the vast outlay of money he had expended upon them. Ford never doubted that the answer would be favourable, and he was right. The more attractive shapes, the choice of colours, the increase in speed—the new Ford could reach seventy miles an hour—proved irresistible, and during the next eighteen months over one million of the new cars were sold.

By this time the Ford Motor Company was a colossal concern. Not content with making cars and purchasing the raw materials from other sources, Ford now possessed his own coal mines, iron mines and forests, from which he obtained the fuel for his factories and the steel and woodwork for his cars. He owned sawmills where the tree-trunks were converted into lumber, blast furnaces for smelting the iron ore, and besides these he possessed railways and a whole fleet of steamships both on the great lakes and on the ocean, as well as factories in England and Canada. Everything was run with ruthless efficiency. There was no place for the laggard in the Ford Company, but at the same time Ford paid his employees better wages than were paid in any other industry of a similar nature. Neither was he unmindful of their welfare. He established his own trade school, where the pupils could learn their work while they earned their living. He also founded a hospital for his employees, not as a charity, which was against his principles, but as a place where they could obtain the best treatment at a cost they could afford. There was also

a lighter side to Ford's character, as witness his love for old things such as folk-dancing, and the museum at Dearborn in which old houses or reproductions of them were erected complete with the furniture and appliances of the times.

The Ford Company continued to thrive till the early thirties; then the business depression throughout the world hit the huge organisation as it hit lesser concerns, and for a time the tide of prosperity was checked. Ford's weathered the storm, however, and prosperity returned. Then came September, 1939, and the outbreak of the second World War. Ford's went on making cars, but gradually, as it became more and more evident that the United States might be drawn into the war, the needs of peace grew less and the requirements of war more urgent. So once again, as in 1917, Ford's changed over to a war footing, and the great Ford factories in America and other Allied countries began turning out weapons of war even more quickly than they once turned out cars. Henry Ford's personal life was saddened by the death of his son Edsel, to whom he had resigned the Presidency of the company. But though over eighty years old Ford remained agile both in mind and body, and in this extremity the old warrior again took upon himself the control of affairs. One of America's wealthiest men—at one time only Rockefeller was richer—he was still the best liked of all America's multi-millionaires. Disapproval of some of his methods there has of course been, for no man who has been a hard driver and has insisted on having his own way can escape criticism, but on the whole American labouring men regarded Ford

with a friendly eye. For he had reached his position by real work and endeavour; moreover, as an expert in the development of machinery, he had conferred definite benefits both upon his own countrymen and the world at large. It is no exaggeration to say that millions of people have had their lives made lighter and brighter by Henry Ford.

FRANKLIN DELANO ROOSEVELT

1882-1945

Near Poughkeepsie, on the Hudson River, there is a landed property known as Hyde Park, and there, in the latter half of the last century, dwelt a James and Sara Roosevelt. James Roosevelt occupied a position somewhat similar to that of an English country squire. He was a man of good family, sufficiently well off to live his life according to his tastes, contented with his lot, and wholesomely contemptuous of those of his countrymen who spent their lives struggling to make huge fortunes which they were often too busy to enjoy. Sara Delano Roosevelt was James's second wife. She was a good deal younger than her husband, and on January 30, 1882, she presented him with a son who was christened Franklin Delano. Outwardly this baby was like any other infant. When annoyed he could yell as lustily as the best, but somewhere in baby Franklin's make-up there lay a germ of future greatness, for this little scrap of humanity was in the years ahead to become America's man of destiny, and one who, with three others of equal greatness, was to be the hope and inspiration of all freedom-loving mankind.

Franklin's childhood was a very happy one. He received his early education at home in company with some neighbouring children. With them he shared governesses and tutors from whom he learned French.

German, and other subjects, while his mother and father were his constant teachers, not in dry, commonplace ways by means of school-books, but by explaining and stirring his interest in birds, animals, growing plants, and in all the natural, ordinary things he saw around him every day of his life. In due course he was given a shot-gun, but only on the strict understanding that he never shot any living creature for the mere pleasure of killing. He was also taught to stuff and mount the birds he shot, and some of the three hundred specimens he in time collected may still be seen at Hyde Park.

Franklin, was, indeed, an outdoor boy. He learned to ride and often accompanied his father when he went out on horseback, he became a strong swimmer, and developed into quite a good tennis player. He was also taught to handle a boat, and at the age of fourteen he was given a small sailing boat of his own with a tiny cabin just large enough to hold two people. Water and anything to do with ships had already a fascination for young Franklin, and were to develop into one of the chief interests of his life; indeed, had the boy not become a great statesman, he would very likely have made a name for himself as a seaman.

Franklin's education was not confined to his home State or even to his home country. Several times he accompanied his father on trips abroad, on two occasions going to a school at Nauheim in Germany while his father underwent a cure at that place, and by the time he was fifteen he had also visited England and France. On one occasion he and a tutor set out on a bicycle tour through part of Germany, but instead of

putting up at good hotels, as they could well have afforded to do, they intentionally roughed it on eight marks a day (about eight shillings or two dollars) for the two of them. This did not allow for any luxuries. Their food consisted mainly of black bread and cheese, and at night they put up at wayside inns or in peasants' cottages, but they had a thoroughly good time, and Franklin proved that the wealthy gentleman's son could rough it as well as anybody.

In 1897 Franklin's parents decided that it was time he went to school, so he was sent to Groton, a school holding the same rank in America as a big public school does in England. At the time it was intended that the boy should study for the law when he grew up. The prospect did not particularly thrill Franklin, but his father wished it, so he agreed, although his love for ships and the sea had already bred in him a great desire to join the navy. Indeed, he very nearly did do so, despite his good intentions, and the life of the boy who has become one of the leaders of freedom might have followed an entirely different course had not Fate intervened at the last moment. It happened in this way.

While Franklin was at Groton the Spanish-American War broke out, and hearing that the navy was enlisting recruits at Boston, he and two of his friends decided to run away from school and join up. Sunday was the day fixed for their departure because, there being no lessons, they reasoned that they would not be missed so soon, but on Saturday night the three conspirators complained of sore throats and feeling ill. The next day they were worse, and when the time arrived at which they had

planned to be setting out on a life of high adventure, they were all three in bed in the school sanatorium, ignominiously suffering from an attack of measles.

In 1900 Franklin Roosevelt left Groton and went to Harvard University, where he adopted history and government as his chief studies. Born leaders are not usually great scholars, and Roosevelt was no exception to this rule. When more seriously minded graduates were devoting their spare hours to extra study, he much preferred to spend his time talking with fellow students similarly inclined, and these talks often developed into lengthy and heated arguments. For this young man was already the possessor of strong views on many subjects. He despised snobbery, though he came of a class in which many people were snobs. From his father he had inherited a hatred of injustice, and like his distant relative, the famous Theodore Roosevelt, he was down on all forms of dishonesty and crookedness both in public and private life. Such things always raised the fighting instinct in him. He wanted to grapple with them and overthrow them, and already he was conscious of a desire to do something worth while in the world, to help his fellow countrymen, and somehow make America a better place to live in than it was.

Some outlet for these feelings he found in articles which were published in the *Crimson*, the Harvard undergraduate newspaper. Not all his time, however, was given up to study and argument. Franklin was now a big handsome young fellow already over six feet in height and still increasing in breadth and strength, and much of his surplus energy was expended in rowing,

football, and other sports. From this time also dates his hobby of book-collecting, and as he soon realised that it would be impossible to acquire all books on all subjects, he decided to specialise in one subject only. But what subject should he choose? It must be something to do with America, and because of his love for the sea, something to do with ships, so finally he decided to collect books dealing with the American navy. To-day Franklin Roosevelt possesses the finest private collection of books on that subject in the country.

Nineteen hundred and four was an important year for Franklin Roosevelt. In that year he passed out of Harvard and went to the Law School of Columbia University in New York City, and he also became engaged to his cousin, Eleanor Roosevelt, the niece of Theodore Roosevelt, "Uncle Ted" as she called him. Eleanor was a quiet, reserved girl. She had lost her father and mother some years before, and since then had been brought up by her grandmother, Mrs. Valentine Hall. Mrs. Hall was a strait-laced old lady, and believed in bringing up young people strictly. As a result Eleanor had little to say for herself or to other people, and showed no signs of the character and personality which in years to come was to make her so striking a figure as the first lady in the land, and enable her to take a leading part in the life of the country.

The young people were married the following year, and to add glory to the event Uncle Ted, at that time President Theodore Roosevelt, consented to give the bride away. It was a grand wedding, quite the chief event of the New York season, but the main attraction,

so far as the guests were concerned, was not the bride and bridegroom but Uncle Ted. Indeed, before long Franklin and his bride found themselves standing alone in the reception-room, so having nothing to do, they went in search of their guests. They discovered them in the library, forming a solid crowd round Uncle Ted, who was making them laugh by telling them funny stories, and realising that a mere pair of newly-weds could not possibly compete with the famous President, Eleanor and Franklin joined the crowd and laughed also.

Franklin was married, but he had still to complete his law studies, so he and Eleanor made their home in a New York City hotel while he attended his classes at the University. Summer came and the bride and bridegroom made a trip to Europe; then home again to complete his law course, at the end of which he became a member of the firm of Carter, Ledyard, and Milburn, prominent city lawyers. There, following his love for the sea, he specialised in marine law, but though he was liked by his employers and promised to make a good lawyer, the work did not satisfy him. It did not fulfil his longing to be up and doing something, to be fighting battles, and when in 1910 the Democrats in his district (Dutchess County) asked him to be their candidate for a seat in the New York Senate, he resigned his position with the firm and threw himself into politics. This was the turning-point in Franklin Roosevelt's life. Had he declined the offer, and there were many influences at work, even in his own family, trying to dissuade him, he might never have been any-

thing more than a good lawyer. Instead he accepted the challenge, and so set his feet upon the first rungs of the ladder leading to world-wide fame.

As it happened, this first political contest promised a fight after his own heart. For thirty-two years Dutchess County had returned a Republican to the New York Senate, and there seemed no reason why the electors should suddenly change their minds, except one. That one was Franklin Roosevelt himself. The very odds against him strengthened his determination to win, and in order to get in touch with the electors in every part of the county, he hired a motor car and spent his days touring the constituency. Like many motor cars in those days it was not a good car, and was continually breaking down, but instead of letting this trouble him, Roosevelt turned it to his advantage. When the car stopped, a crowd of country-folk would almost always gather round to stare at the unusual sight, and while the driver was making repairs, Roosevelt occupied his time by delivering a speech, and very soon the derisive grins which had greeted his mishap would be turned into hearty, good-natured laughter. Then, when the repairs had been completed, Roosevelt shook hands with everyone present, one of his companions produced and waved an American flag, and to the accompaniment of friendly farewells, the car and its occupants would rattle off to their next destination or next breakdown, whichever came first.

This was electioneering such as Dutchess County had never seen before, and it completely knocked the wind out of the Republican sails. Wet and fine, Roosevelt

was out in his ramshackle conveyance. Often he made as many as twenty speeches a day, and there was no part of the constituency so remote that he did not visit it. He was, indeed, determined to win this his first political battle, and when election day came round, win he did, to the surprise of his friends and the annoyance of his adversaries who, before the advent of this surprisingly energetic young man, had looked upon Dutchess County as their own particular property.

So Franklin Roosevelt became a member of the New York Senate, and he soon proved that, like his great namesake Theodore Roosevelt, he was no man's servant, and that the party bosses could not compel him to any course of action he thought wrong. From the very start, indeed, he joined in a battle with members of his own party. At that time members of the United States Senate were chosen by the various State governments and not by the direct vote of the people, and the Democratic bosses of New York State had decided to send a lawyer named Sheehan as their representative to Washington. For various reasons Roosevelt thought this man unfitted for the position, and vigorously opposed his election. Thereupon followed a long political battle with all the power of the party machine ranged against Roosevelt and his supporters. But the young politician refused to give way, and his opponents were to discover for the first time what a fighter he was, and in the end Roosevelt and his friends won, and another candidate was nominated. This success made Franklin Roosevelt famous in New York State, and respected by all those who favoured honest government.

It was also in part due to his fight on the matter that the Constitution of the country was subsequently altered to provide that future United States Senators should be elected by the popular vote of the people, and not by the party committees in the different States.

This happened in 1911. The following year a presidential election was due. The Republican candidates were W. H. Taft and Theodore Roosevelt, and after a dispute, in which Franklin Roosevelt took a prominent part, Woodrow Wilson was nominated the Democratic candidate. In the campaign which followed, Wilson was successful and was elected President, and when he took office in March, 1913, he offered Franklin Roosevelt the post of Assistant-Secretary of the Navy under Josephus Daniels. Here was a job above all others which appealed to him. Roosevelt accepted at once, resigned his senatorship of New York State, and on March 17, 1913, took the oath of office. He was thirty-one years of age.

Franklin Roosevelt's new post was an important one, and it became still more so when in August, 1914, the first World War broke out in Europe. At that time the American navy was ill-prepared for war, and President Wilson, who hated war and wished above all things to keep his country out of hostilities, did not encourage its reform. He maintained that, though America might eventually be drawn into the fight, she must not go out of her way to prepare herself for war lest future historians should fasten war guilt upon her. This was an attitude Roosevelt could not understand. Of all Americans he was the least isolationist. He knew that a great nation

could not cut itself off from the rest of the world, and on every possible occasion he dinned it into the minds of his fellow countrymen that if they wished to keep out of war, then the best way was to be well armed, and especially to possess a strong navy, and that weakness in armaments only encouraged the aggressor. Few people listened to him, however, but this national lack of interest only served to rouse the fighting instinct in him. As he was to prove so often in after life, the harder the battle the greater his courage, and in this matter of being prepared, he was resolved that so far as he was concerned his country should not suffer for its apathy.

In this determination there was one great thing in his favour. He possessed the complete trust of his immediate chief, Josephus Daniels, and as the German U-boat campaign increased in ferocity, and the clouds of war crept nearer across the waters of the Atlantic, Franklin Roosevelt, on his own initiative and without any authority from Congress, began to place orders for guns, ammunition, and other war stores, and to bring the navy up to a war footing as far as it was possible for him to do. What would have happened had he been found out it is difficult to conjecture. Almost certainly he would have been dismissed his post, and had a serious check put to his career. But Roosevelt knew that he was doing right and so he took the risk, and as his courage deserved, he won through. For in 1916 President Wilson at last agreed to an increased navy, and a bill was passed by Congress giving the young Assistant-Secretary the power to do the very things he had already set on foot on his own authority

several weeks before. Thus it was due to Franklin Roosevelt more than anyone else that, when war did come to the United States in April, 1917, the American navy was as ready as it was to face the hazards of combat.

Franklin Roosevelt was now recognised as a coming man. Americans saw in him a forceful, incorruptible politician, a man who might be trusted and followed. In July, 1918, he crossed the Atlantic and visited England, France and Italy. In these countries he had conversations with many of the leading men on matters connected with the war, visited the front, then, returning home in the *Leviathan*, went down with double pneumonia. So he came back to doctors and nursing, but soon after the Armistice in November, 1918, and while he was barely out of the convalescent stage, he was off to Europe again, this time accompanied by his wife. On this occasion his work had to do with selling American naval property in Europe, and settling similar matters connected with his department, and when this was done he sailed for home on the *George Washington*. President Wilson was returning in the same ship. He had been attending the Peace Conference at Versailles, and had secured the promise of the European nations to form a League for the abolition of war, and now he was going back to his own land in the firm belief that his countrymen would wholeheartedly join the League he had striven so hard to create. Franklin and his wife sincerely supported the President in his plans, and soon after their return to America, Roosevelt began to make speeches in support of the League. He saw as clearly as President Wilson

that a League without America would be shorn of half its power, and that probably the only way of preventing future wars more terrible than the one just ended was for the United States to cast aside for ever her ideas of isolation, and join with other law-abiding nations in policing the world and protecting good against evil. So he believed, so Wilson believed, so they and others preached up and down the country, but Americans would not listen. They had had enough of war. They feared that if they joined the League they would be dragged into future wars against their will, so they rejected President Wilson's noble plan, and rejecting it threw aside the world's greatest hope of lasting peace and left the way open for the growth of those powers of evil which brought disaster upon the nations in September, 1939.

President Wilson was by this time a dying man, but Roosevelt and others who believed in his League carried on the fight, and when the next presidential election came round in 1920 the Democrats fought it on the question of the League of Nations. In this election James M. Cox, Governor of Ohio, was the Democratic candidate, and to his own great surprise Franklin Roosevelt was nominated for the Vice-Presidency. But they were fighting for a dead cause. Americans would have nothing to do with the League or those who supported it, and the election resulted in the Democratic candidates being overwhelmingly defeated and their opponents, the Republicans, put into power. At the same time Franklin Roosevelt found himself out of a job.

Well, it was the fortune of the political game, and until his party returned to power, Roosevelt decided to seek another outlet for his energies. Many offers were made to this go-ahead, forceful man, and finally he accepted the Vice-Presidency of the Fidelity and Deposit Insurance Company of Maryland, and in due course found himself in charge of the company's New York office. He may indeed have welcomed a brief relief from politics provided the respite did not last too long. After all, he was now the father of five children, and a prominent politician did not get too much time for home life. We may believe that at least his wife was glad to see him relieved of the burden of government for a while, and when the holiday season came round in the summer of 1921, it was a joyful party which gathered at the Roosevelt summer home on Campobello Island off the coast of Maine. Alas! it was a holiday which was soon to be clouded with dismay and sorrow. Returning one day with his sons from a bathe, Franklin Roosevelt complained of feeling unwell, and retired to bed, as he thought with a chill. The next day his left leg was stiff, then his right leg stiffened, and within three days both his legs were seriously paralysed. It was not a chill he had contracted, it was that dreaded disease, infantile paralysis, so prevalent in the United States.

What a frightful blow to a man as energetic as Franklin Roosevelt, and one who was upon the threshold of a splendid career! Few of those who knew what had happened thought he would ever recover. The doctors said that if he fought hard and did painful exercises

every day he might in time regain the use of his legs, but they warned him that the strain of the constant battle would be so great that his health might break down under it. But Roosevelt refused to look on the black side. He would beat this thing, so once again he girded himself for the fight, the reward of victory this time being health, his career, the life of a normal man in place of that of a cripple.

It was a grim struggle this man so suddenly stricken took upon himself to wage. He had loyal helpers, his wife, his mother, and notably a journalist named Louis Howe, who now sacrificed his own career and devoted his whole time to the invalid, forming a link between the outside world of life and action and Roosevelt the cripple. But Roosevelt's chief ally was himself. He refused to give in and become a back number. He fought with all his will against his malady, and at last returned to his work in New York; yet, at the end of three years, his legs were still paralysed, he was still an invalid.

Then one day there came a letter addressed to Franklin D. Roosevelt. It was quite an ordinary letter; yet it was to alter the whole of the receiver's after life and perhaps, through him, affect the destiny of nations. It was from a young man who had also been stricken with infantile paralysis, and who had been almost cured by bathing and exercising in a pool of water at Warm Springs, Georgia. Roosevelt read the letter and straightway decided to see what Warm Springs could do for him, and the autumn of 1924 found him there and bathing in the warm water. This first visit lasted six

weeks, and was succeeded by many others, for during those six weeks Roosevelt made greater strides towards recovery than in the three years since he had first been stricken with the disease.

No wonder Franklin Roosevelt was filled with new hope. At last he had found a way of combating his dread complaint, and being the man he was, he wanted to share his discovery with other similar sufferers. Accordingly he bought the springs and the surrounding property, and by sinking half his private fortune in the venture, he formed the Georgia Warm Springs Foundation to which sufferers from infantile paralysis might come from all over the States, and if not be completely cured, at least gain considerable relief from their affliction.

The same year which saw Roosevelt's first visit to Warm Springs also witnessed his re-entry into political life. He came back on behalf of Alfred E. Smith, a friend of his who was standing for nomination as Democratic candidate for the Presidency, and who asked Roosevelt to manage his election campaign. Roosevelt was still an invalid, but he agreed to his friend's request and actually made a speech in favour of Smith's nomination. It was a good speech, too, and though Smith was not successful, Roosevelt won universal admiration for the way in which he conducted the campaign.

Smith had not been nominated as candidate for the Presidency, nevertheless, he determined to have another try. Meanwhile, he was Governor of New York, and when in the 1928 presidential election he again stood for nomination as Democratic* candidate and was

chosen, the governorship of the State became vacant. Thereupon the question arose, whom should the Democrats put forward for election in Smith's place? The choice fell on Franklin D. Roosevelt. His visits to Warm Springs had done him good, but he was still far from cured, and at first he refused to stand. His friends, however, pressed him to accept the offer, and at last he agreed. His reward came on the election day when he proved to be the successful candidate, and on January 1, 1929, he took over his new duties as Governor of New York.

During the years when Franklin Roosevelt had been out of action a great change had taken place in the life and interests of his wife Eleanor. At the time of her marriage, and for several years after, she had taken little interest in politics. She had not understood them, and her husband's political ambitions and political life were things in which she had no part. She had her children and her home, that was her sphere, and she was content that it should be so, and to leave the task of government to the men. But when her husband was stricken down and became a partial cripple; matters took on a different aspect. It was important that his interests should be maintained, that he should not lose touch with political affairs, and to help towards this object, on the advice of Louis Howe, Eleanor Roosevelt began to take part in political work herself. At first she hardly knew what she was doing, but as her interest grew and her understanding of politics quickened, she entered more and more into affairs. Much of her work was naturally concerned with women, like her connection with the

Women's Trade Union League and the League of Women Voters. All the same, she interested herself in other matters, and by the time her husband became Governor of New York, the rather shy, retiring woman had disappeared, and in her place there was the shrewd politician and advocate of woman's rights so prominent in American life to-day.

Franklin Roosevelt was twice elected Governor of New York, in 1928 and again in 1930. He was a good Governor. In all he did his first thoughts were how the people at large might benefit most, and he was the enemy of those great business combines which sought to grow wealthy at the public expense. Thus, in dealing with the question of electric power derived from the River St. Lawrence, he set his face resolutely against the ownership and control being in the hands of a private company which might charge what it liked for the electricity and so fatten upon the people's needs. Instead, he insisted that electrical energy derived from natural resources was common property and should be distributed to all people at the lowest possible cost. He also did much to help agriculture, and encouraged the improvement of country roads and the extension of electricity and other modern conveniences to the farms. Under Franklin Roosevelt, indeed, government became more than a party affair. He saw it as something in which all men, whatever their views, should labour together to the best of their ability for the public good, and so successful was he in allaying party strife that the Republican leaders, who in the usual way would have been his most severe critics, unhesitatingly de-

clared that his Governorship had been the best that New York State had experienced for twenty-five years.

It seems astonishing that a man who was still so badly disabled could do all that Franklin Roosevelt did at this time, but he made great use of the wireless in getting in touch with the people, and soon became an expert broadcaster. Meanwhile, all was not well with the United States of America. After a period of great prosperity which all Americans thought had come to stay, there came suddenly, like a bolt from the sky, the terrible trade crash of October, 1929.

There were many reasons for this immense disaster. Two of the chief were over-production in the States and the impoverished condition of the rest of the world. The after-effects of the first World War still overshadowed the nations of Europe, and because they were all in debt to America, and had been sending great quantities of gold to the States in payment of those debts, they had little spare money with which to buy American goods. It was actually a case of America being too rich and the rest of the world too poor. Throughout the prosperous years before October, 1929, American factories had been turning out vast quantities of trade goods such as motor cars, shoes, machinery, and articles of clothing. American farmers, too, had grown millions of bushels of wheat, and throughout the country men and women had been producing more and more and still more articles of trade, thinking that they were all going to be sold, and that the States had entered upon an era of prosperity such as it had never known before. And then suddenly it was discovered that there was no

one to buy the goods. The gold which might have enabled Great Britain and other European nations to purchase them was buried in American vaults where, for all the use it was, it might have been so much mud. Therefore, because trade must die if there are no buyers, factories all over the country suddenly shut down, thousands of farmers went bankrupt, banks closed, and millions of people found themselves without employment and faced with poverty and want.

This shocking collapse of the nation came during the Presidency of Herbert Hoover, who had succeeded Calvin Coolidge in 1929, and for four years he and his advisers laboured desperately to mend matters. But in this they had no success. Discontent and despair lay over the country like a dark cloud, and found expression in numberless strikes and riots. Thus when the next presidential election became due in 1932, it was not surprising that Americans in their distress looked round for someone who would bring some alleviation of their sufferings. Their choice fell upon the man who was Governor of New York. He had been nominated by the Democratic Party as their candidate for the Presidency, and because in his election speeches he promised the American people a "new deal", because his whole political history proved him to be a "straight-shooter", a man who fulfilled his pledges to the best of his ability, the electors chose him to be their leader by a record majority, and in March, 1933, Franklin D. Roosevelt first entered the White House as President of the United States.

It was a gigantic task he had undertaken, but by this

time he was once again fit for the fray, in spite of severe physical handicaps. He found the country in a state of dreadful chaos, and at once took measures for relief. Within a few months the National Industrial Recovery Act, the first act of his promised "New Deal", had been passed. Actually, what he set out to give the States in his "New Deal" was a new way of living. The old rules by which the national life had been governed he declared to be wrong or at least no longer fitted for the times, and he insisted that the American people could not regain their prosperity and happiness until the business and social life of the country had been set upon a new basis. The prime necessity was a fairer distribution of wealth. This meant that the wealthy must pay in taxation a greater share of the expenses of the country. At the same time the wages of the workers must be higher and the profits of the master-men less, so that the poorer people would be able to buy more, while the rich men would have less money to spend on the manufacture of surplus goods with which to glut an overcrowded market. Once this was done trade would begin to flow normally again, and a fair portion of happiness and prosperity would be within the reach of all people.

Such in brief were the main ideas behind Franklin Roosevelt's "New Deal" and his National Recovery Administration, known as N.R.A. To hasten the fulfilment of his plans, the government took over control of a great deal of the agricultural and industrial life of the nation. Schemes were devised on a vast scale to find employment for engineers and craftsmen of all kinds, as

well as artists, authors and even actors, on work which would benefit the nation as a whole. Such schemes, however, were not carried through in a day. Meanwhile the alleviation of immediate suffering was made more difficult by the fact that, until this crisis, the ordinary American citizen had rarely needed the help of the government or the local authorities, and there was very little provision, such as is found in Britain, for aiding the impoverished and the needy.

Accordingly a huge new organisation had to be created almost overnight, as it were, to carry the people over the evil times, and well it was for the nation in its hour of need that it had a strong man in charge. For the President found plenty of opposition from powerful people who had never before had to submit to government control. The great employers of labour were among his especial enemies, for they had always considered workers' trade unions, like those of Great Britain, against their interests, and now, under Roosevelt's administration, such unions were recognised and given power. Some of his acts, too, were pronounced unconstitutional by the judges of the Supreme Court, and again and again the President suffered setbacks which would have discouraged a weaker man. Even some of his chief advisers would not support all his measures of reform. But with Roosevelt opposition of this kind was only an urge to greater effort, and his schemes were so far successful that by 1936 he had lifted the American people out of their worst depression and set them once more upon the high road to prosperity.

Other matters besides the return of prosperity to the

nation also occupied Roosevelt's attention. Old-age pensions, unemployment insurance, the health of mothers and child welfare, had long been neglected, and in 1935 he tremendously increased his popularity with the mass of the people by securing the passage of the Social Security Act. Meanwhile, amid all the calls required upon his energy to mend matters at home, Roosevelt had yet found time to play no small part in affairs outside the country. It was he who inspired the World Economic Conference in London, by which it was hoped some of the world's difficulties might be solved, and it was not his fault that the Conference was a failure. In May, 1933, he made an effort to promote international peace, by appealing for the abolition of all aggressive weapons of war, and in the same year he supported the League in the Chinese-Japanese dispute. He did, indeed, do his best to ensure both the recovery and happiness of his own nation and the welfare of the world at large, and when in 1936 he stood again at the Presidential election he was returned to the White House by an overwhelming majority.

Roosevelt's second term as President was to witness the recovery of the United States and the plunging of Europe into war by Germany for the second time within twenty-five years. Adolf Hitler had become Chancellor of Germany in 1933, the same year as Franklin Roosevelt was inaugurated President of the United States, and with his advent to power the clouds of another war had begun to gather over the countries of the Old World. Mussolini, the Italian dictator, with his constant boasts and threats, likewise did nothing to

assuage the general feeling of unrest. Meanwhile, in America the Isolationists were quick to note the signs of the coming storm, with the result that in 1935 the Neutrality Act was passed forbidding the export of all munitions of war to belligerent countries. It was an unjust act, for it made no distinction between the aggressor nation and the unfortunate country which had been attacked, and it was merely absurd on the part of the Isolationists to pretend that in the event of war America could remain aloof from troubles that would be bound to imperil her own safety and interests. It also acted as a direct incitement to Hitler and his fellow dictator, for seeing the United States so desperately anxious to steer clear of hostilities, they were encouraged to pursue their unlawful courses in Europe with still greater vigour.

Franklin Roosevelt certainly realised all this, for he was not the man to shut his eyes to unpleasant facts, but if in his heart he disapproved of the bill, public opinion was too strong for him. Also he was naturally and sincerely desirous of keeping his country out of war if honourably possible, and as the clouds gathered darker and darker, he devoted his energies to trying to save the peace. In the autumn of 1938 he twice intervened in the dispute between Germany and Czechoslovakia in an effort to persuade Hitler to come to a peaceful solution, and later he endeavoured to obtain a pledge from the German Chancellor that he would respect the independence of a number of countries, which Roosevelt named, and most of which were fated to be overrun later by the German armies. But pleas

for tolerance and mercy had no effect on Adolf Hitler. They were to him a sign of weakness. Might and superior force were the only arguments he understood, and with these Franklin Roosevelt could not confront him in the then apathetic state of American opinion. So his interventions bore no fruit, and in September, 1939, the long-threatened storm broke and once again Germany sent forth her armies to devastate and conquer.

As in the war of 1914-1918, American public opinion at the outset of hostilities was all in favour of keeping out at any cost, and Germany's invasion of Poland was greeted with a declaration of neutrality from the American President. Knowing Franklin Roosevelt's character, one may be sure that this neutrality did not extend to his own feelings. He knew what Germany aimed at, and what would be the fate of her victims were she victorious. He knew that on the victory of Britain and her ally, France, depended the continuance of all those rights and privileges Americans held so dear, and as a first step towards aiding the democracies he demanded that the Neutrality Act be altered to allow British and French ships to carry munitions of war from American ports to their own countries, provided cash was paid for the goods they took away. Of course Germany had an equal right to avail herself of this cash-and-carry plan could she do so, but as the Allied navies held command of the seas this was impossible, so that this partial raising of the embargo on American war materials was a definite assistance to the Allies. But still American ships were forbidden to enter the war zone and trade

with the belligerent countries lest some should be sunk and the States be forced into the war.

Then came the attack on Belgium, the downfall of France, and the deathless epic of Dunkirk. It thrilled men all over the world, but at the same time they saw in it the last dying struggles of the British Lion. Great Britain is finished, they said. Within a few weeks the war will be over. But the war was not over! To the surprise and admiration of the world the people of the little island girded themselves to face their mighty adversary alone, and when he sent his aerial fleets against them in the latter half of 1940, they were hurled back, shattered and demoralised, with the loss of over two thousand of their number. At the sight the people of the democracies everywhere took heart. The spark of freedom was not dead. It was blazing up again, and with help it might yet become a great and consuming fire, and terror and hatred and cruelty might be driven from the earth. So thought Franklin Roosevelt, who had just been elected President for the third time, an honour never before conferred on any American. So thought more and more of his compatriots as they watched the people of Britain waging the unequal fight, but nevertheless, the great majority of Americans were still bent on keeping out of the war. Roosevelt knew this, but he also knew that Britain and her small Allies must be assisted if they were to carry on the struggle. Already he had exchanged fifty U.S. destroyers for naval bases in British territories, and now, in December, 1940, he put through the "Lease-Lend" Act. By this Act America became the arsenal of the democracies. Britain

and her allies could have all the guns, ammunition, and other materials of war they wanted, and they would no longer have to pay for them out of their dwindling stocks of gold, but at some future date they could return what had been leased to them in equivalent goods.

This Act, which came into force March 11, 1941, was a very great help, but it was less useful than it might have been, for the Neutrality Act was still in force, and American ships were still forbidden to enter the war zone. Thus only the ships of Britain and her Allies could carry the desperately needed munitions across the ocean, and there were not enough of them to convey all that was required, especially when their losses from the attacks of German U-boats were considered.

June 22, 1941, supplied another example of German perfidy. This was the unprovoked attack on Russia, and American opinion veered still more in favour of Britain and her Allies. Nevertheless, the people at large did not want to fight, and "All help short of war", was the cry. Meanwhile, a British force had landed in Iceland to protect that island against a sudden German assault, and British convoys from America were following the Iceland route as being safer from U-boat attack than the straight course across the Atlantic. Then in July, 1941, President Roosevelt made a great gesture. He sent United States marines to Iceland to reinforce the British troops stationed there, and by that action made it plain to all the world that if Germany attacked Iceland she would be attacking the United States as well as Britain.

Americans meanwhile were becoming weary of making

tanks and guns for Britain only to have them sent to the bottom of the ocean by German U-boats, and the opinion was growing that it was no use making the things unless they saw them safely to their destination. Accordingly, about the same time as the marines landed in Iceland, Roosevelt ordered sections of the U.S. Navy to assist the Allies in protecting their merchant ships by patrolling certain areas of the Atlantic, and thus the U.S. Atlantic Patrol was formed. Slowly but surely Roosevelt was bringing his country into line, and all the world now knew that she was standing firmly behind the Allies in their battle for freedom.

The year 1941 will, indeed, stand out as a landmark in history. In August, President Roosevelt met the British Prime Minister, Winston Churchill, "somewhere at sea", and between them the two statesmen drew up the Atlantic Charter. In October the U.S. Destroyer *Reuben James* was sunk by a U-boat while doing convoy duty, and forthwith Roosevelt called upon Congress to repeal the Neutrality Act, and so enable the States to give the Allies, in the fullest sense, all aid short of war. This was finally done on November 13, and for the first time since September, 1939, U.S. merchant ships were free to enter the war zone.

Still the United States was not at war though she was very near it, and, as everyone knows, it was not Germany but the Japanese who, by their treacherous attack on Pearl Harbour, Hawaii, on Sunday, December 7, 1941, brought the great Republic into the actual fighting line. From that dark day onward Franklin Roosevelt never faltered. He was an inspiration not only to



CHURCHILL AND ROOSEVELT MEET TO SIGN THE
ATLANTIC CHARTER

his own countrymen but to all men who cherish freedom, honour, and fair dealing. In January, 1943, he made what must have been for him a trying journey by air to meet Mr. Churchill at Casablanca in North Africa. There they discussed the future conduct of the war, and decided on the offensive action which was to be taken against the enemy during the year.

The fruits of that action quickly followed. Africa was cleared of the foe, and the conquest of Sicily threw open the gates of Italy to the allied armies. These far-reaching events made necessary another meeting between President Roosevelt and the great British Premier. Accordingly, in the second week of August, Mr. Churchill again crossed the Atlantic, this time to Quebec, and from there he paid a swift visit to the United States to confer with Mr. Roosevelt.

Sunday, August 15, was the second anniversary of the Atlantic Charter. Speaking in New York on this occasion, the President said:

“To-day we stand upon the threshold of major developments in this war.

“We are determined that we shall gain that victory over our enemies, and we recognise the fact that our enemies are not only Germany, Italy and Japan.

“They are all the forces of oppression, intolerance, insecurity and injustice which have impeded the forward march of civilisation.”

Meanwhile Mr. Churchill had returned to Quebec, in which city the President presently joined him to continue their conferences. There, assisted by their staffs

of experts, the two leaders made plans for fresh blows at the common enemy, one result of which was the early capitulation of Italy.

Later that year the indefatigable President made yet another visit to the Old World. On this occasion he visited the Middle East, and on November 22-26, 1943, at a place near Cairo, he and Mr. Churchill conferred with General Chiang Kai-shek on problems relating to the prosecution of the eastern war. From there the leaders of the two democracies travelled to Teheran in Persia where for the first time President Roosevelt met Joseph Stalin, Russia's man of destiny. The conference which followed lasted from November 28 to December 1, and there in the capital of ancient Persia plans were made for the final assault upon the enemy citadel of Europe.

That assault had begun and was proceeding victoriously when Mr. Roosevelt and Mr. Churchill again met in Quebec in September 1944 to discuss the political problems of post-war Europe and future joint action against Japan. In November the presidential election took place, and for the fourth time Mr. Roosevelt was returned to the White House. In February 1945 he made another journey to Europe, and at Yalta in the Crimea he met Mr. Churchill and Marshal Stalin. With them he discussed the final phases of the war, now rapidly nearing a victorious end, and, more important still, the formation of a world organisation which it was hoped would make humanity safe for ever from a repetition of the horrors of the past six years. That organisation was to be shaped at a Conference of the United Nations held at San Francisco and beginning in April 1945. President

Roosevelt agreed to preside over the Conference, and there was every hope that under his wise direction it would achieve its high purpose. Alas, the great President who had done so much to save freedom was not to see the final triumph of the cause for which he had laboured so long and so ardently. Early in April he paid a visit to Warm Springs for a much-needed rest and in the afternoon of April 12th he was sitting quietly in his chair, reading some official documents, while an artist was sketching his portrait, when suddenly, without any warning, he lost consciousness, and within a few hours he was dead. So passed perhaps the greatest of all American Presidents. Few men have left behind them such a void. Something had been taken away which could never be replaced, and all over the world people of every race and creed and colour mourned the loss of a friend. Mr. Winston Churchill paid tribute to the dead leader in a memorable speech in the House of Commons, concluding with these words :

“He had broadened and stabilised in the days of peace the foundations of American life and union. In war he had raised the strength, might and glory of the great Republic to a height never attained by any nation in history. . . . In Franklin Roosevelt there died the greatest American friend we have ever known, and the greatest champion of freedom who has ever brought help and comfort from the New World to the Old.”

